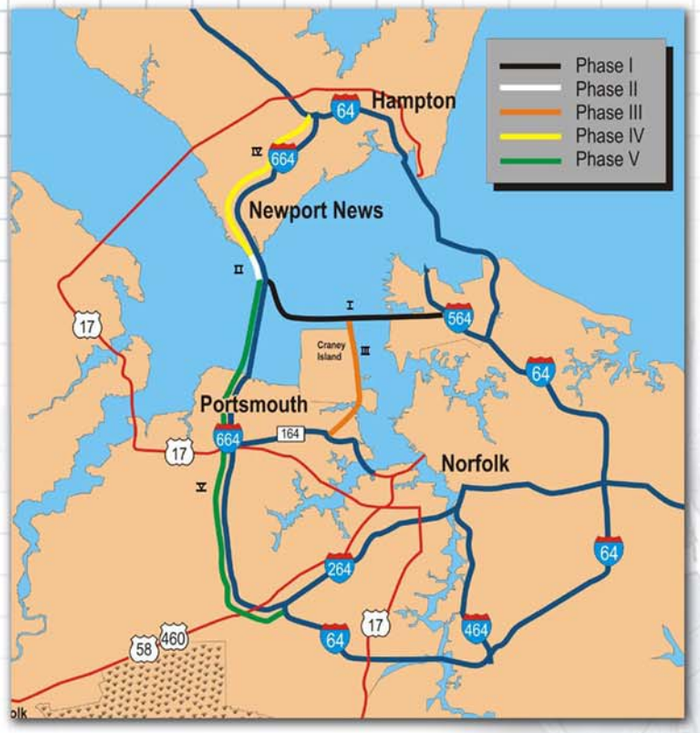
Third Hampton Roads Crossing
Conceptual Proposal

June 30, 2004



Presented By:

SKANSKA · WASHINGTON · BAM

SKANSKA

Washington Group International

SWB

bam

June 30, 2004

Mr. Malcolm T. Kerley, P.E.
Chief Engineer for Program Development
Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219

Re: Conceptual proposal pursuant to the Public-Private Transportation Act of 1995 for design, construction and financing of the Third Hampton Roads Crossing

Dear Mr. Kerley:

Enclosed are twenty (20) copies of the Skanska/Washington/BAM (SWB) conceptual proposal for the Third Hampton Roads Crossing submitted in accordance with both the Public-Private Transportation Act of 1995 (PPTA) and the Department of Transportation's Implementation Guidelines. A copy of the proposal is being delivered to all appropriate jurisdictions as indicated in the attached.

TAB 3 of the proposal, the Project Financing, is considered proprietary and confidential in its entirety. The attached letter granted exemption from all Freedom of Information Act requests for this portion of the proposal.

A cashier's check in the amount of $10,000 is being forwarded separately to cover VDOT's review costs.

SWB is looking forward to VDOT's favorable consideration of this proposal for the critical Third Hampton Roads Crossing Project.

I am the designated SWB point of contact for this project.

Sincerely,

F. X. Watson
Project Director
Attachments: 1) Local Jurisdiction Distribution
2) Letter regarding Confidential and Proprietary Information

SKANSKA ▪ WASHINGTON ▪ BAM
P.O. Box 57, Norfolk, VA 23501 809 S. Military Highway, Virginia Beach, VA 23464
Tel: 757-420-4140 Fax: 757-420-3551

Attachment 1. AFFECTED LOCAL JURISDICTIONS

Distribution List

TAB 3 not provided with these copies

Mr. George E. Wallace, City Manager
City of Hampton
22 Lincoln Street
Hampton, Virginia 23669
(Mr. Charles A. Wornom, Mayor)

Mr. Ed Maroney, City Manager
City of Newport News
2400 Washington Street
10th Floor City hall
Newport News, Virginia 23607
(Mr. Joe S. Frank, Mayor)

Mr. Jackson C. Tuttle, City Manager
City of Williamsburg
401 Lafayette Street
Williamsburg, Virginia 23185
(Ms. Jeanne Zeidler, Mayor)

Mr. Charles W. Burgess, Jr., City Manager
City of Poquoson
500 City Hall Avenue
Poquoson, Virginia 23662
(Mr. Gordon C. Helsel, Jr., Mayor)

Mr. Robert "Steve" Herbert, City Manager
City of Suffolk
441 Market Street
Suffolk, Virginia23434
(Mr. Dana W. Dickins, III, Mayor)

Mr. C. W. McCoy, City Manager
City of Portsmouth
801 Crawford Street
Portsmouth, Virginia 23704
(Dr. James W. Holley, III, Mayor)

Mrs. Regina V. Williams, City Manager
City of Norfolk
810 Union Street
Norfolk, Virginia 23510
(Mr. Paul D. Fraim, Mayor)

Mr. Clarence V. Cuffee, City Manager
City of Chesapeake
306 Cedar Road
Chesapeake, Virginia 23328
(Mr. Dalton Edge, Mayor)

Mr. James K. Spore, City Manager
City of Virginia Beach
2401 Courthouse Road
Municipal Center, Bldg. #1
Virginia Beach, Virginia 23456
(Mrs. Meyera E. Oberndorf, Mayor)

Mr. Rowland L. Taylor, City Manager
City of Franklin
207 West Second Street
Franklin, Virginia 23851
(Mr. James P. Councill, III, Mayor)

Mr. Peter M. Stephenson, Town Manager
Town of Smithfield
315 Main Street
Smithfield, Virginia 23431
(Mr. Stan D. Clark, Chairman)
Isle of Wight Board of Supervisors

Mr. Sanford B. Wanner, County Administrator
James City County
101 Mounts Bay Road
Williamsburg, Virginia 23187
(Mr. Bruce Goodson, Chairman)
James City County Board of Supervisors

Mr. W. Douglas Caskey, County Administrator
Isle of Wight County
17130 Monument Circle-Suite A
Isle of Wight, Virginia 23397
(Mr. Stan D. Clark, Chairman)
Isle of Wight County Board of Supervisors

Attachment 1. AFFECTED LOCAL JURISDICTIONS
Distribution List
TAB 3 not provided with these copies

Mr. James O. McReynolds, County Administrator
York County
224 Ballard Street
Yorktown, Virginia 23690
(Mr. James S. Burgett, Chairman)
York County Board of Supervisors

Mr. Michael Johnson, County Administrator
Southampton County
26022 Administration Center Drive
Courtland, Virginia 23837
(Mr. Dallas O. Jones, Chairman)
Southampton County Board of Supervisors

Mr. William H. Whitley, County Administrator
Gloucester County
6467 Main Street
Gloucester, Virginia 23061
(Mr. Charles R. "Rick" Allen, Jr., Chairman)
Gloucester County Board of Supervisors

Mr. Terry D. Lewis, County Administrator
Surry County
45 School Street
Surry, Virginia 23883
(Mr. Reginald O. Harrison, Chairman)
Surry County Board of Supervisors

Mr. Arthur L. Collins, Executive Director
Hampton Roads Planning district Commission
723 Woodlake Drive
Chesapeake, Virginia 23320

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219-2000

PHILIP A. SHUCET
COMMISSIONER

MALCOLM T. KERLEY, P.E.
CHIEF ENGINEER FOR PROGRAM DEVELOPMENT

June 11, 2004

Mr. F. X. Watson, P.E.
Project Director
Tidewater Skanska
P. O. Box 57
Norfolk, Virginia 23501

Re: **PPTA Proposal Confidentiality Request for the Third Crossing**

Dear Mr. Watson:

I am in receipt of your letter dated June 10, 2004 in which you request that the section identified as Tab 3 "Project Financing" submitted as part of the above-referenced conceptual proposal be treated as confidential and proprietary.

In accordance with the applicable statutes governing such matters (Section 2.2-3705.A.56 of the Code of Virginia), I am granting your request that Tab 3 "Project Financing" of the conceptual proposal be held confidential and proprietary subject to the following:

- The official submittal that will be available to the public clearly defines and identifies the use of all public funds and other financial commitments of the Commonwealth.

- Upon a detailed review of your proposal, the Department reserves the right to rescind all or any part of this exemption. Before the Department exercises this option, you will be afforded an opportunity to discuss this decision with us.

Sincerely,

Malcolm T. Kerley, P.E.

Copy: Mr. Philip A. Shucet
Ms. Barbara W. Reese

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Introduction – Skanska/Washington/BAM (SWB), a joint venture of Skanska USA, Inc. (Skanska), Washington Group International (Washington) and Royal BAM Group nv (BAM) is submitting an unsolicited proposal for the development, design, construction, financing, operation and maintenance of the Third Hampton Roads Crossing. This conceptual proposal is submitted in accordance with the Virginia Department of Transportation's (VDOT) implementing guidelines for the Virginia Public Private Transportation Act of 1995. This conceptual proposal is based upon the Major Investment Study (MIS), the Environmental Impact Statement (EIS) and the 2001 Record of Decision. The design team of Parsons Brinckerhoff Quade & Douglas, Inc. and Jacobs Civil, Inc. (Jacobs) (formerly JE Sverdrup) will serve as the engineer-of-record. The SWB Team members have been involved with the design and/or construction of all of the tunnels and bridge-tunnels in the Hampton Roads area.

Project Configuration - The Third Hampton Roads Crossing involves the construction of 13 miles of limited access expressway in addition to widening 15 miles of interstate highway. The project will cross Hampton Roads and the Elizabeth River via trestles and two new tunnels to provide greatly enhanced mobility in the Hampton Roads area.

Project Need - The Hampton Roads region is a major residential, commercial and tourist area in Virginia and home to many military installations. Increasing traffic volumes have outstripped capacity. The MIS and EIS predict traffic levels will become so critical that by the time any solution is in place the regions economy will be stifled and noxious emissions will impair the health of individuals. Without near-term relief, the quality of life and the region's economy will decline. Several recent occurrences of major gridlock are just another indication that the Third Hampton Roads Crossing is needed earlier rather than later.

Consistency with Concept - The EIS provides an estimate of $4.4 billion to construct the Metropolitan Planning Organization's (MPO) Locally Preferred Alternative that was approved by the Commonwealth Transportation Board. In 2000 VDOT anticipated that the project could be completed in 2014. This conceptual proposal contains alternatives that dramatically reduce the project's cost and accelerates the completion date of the Third Hampton Roads Crossing. The concepts that are offered by this conceptual proposal are consistent with the Third Hampton Roads Crossing MIS and EIS. Specific recommendations for the project's financing and development are included.

Environmental - All known environmental issues can be prudently and economically mitigated based upon SWB's proposed develop-finance-design-build-operate-maintain approach and SWB's experience with addressing the same issues on previous projects. The entire Conceptual Proposal is based upon the Record of Decision (ROD) issued on June 4, 2001.

Utility Plan – The SWB Team will assume responsibility for utility coordination and relocations. Proactive communication will be maintained with impacted utility owners to quickly resolve all utility issues.

Property Acquisition – According to the EIS, 38 residences and 11 businesses will need to be relocated. The SWB Team will be responsible for obtaining real estate and will prepare the necessary documentation for VDOT in cases where taking by eminent domain is required.

Design and Construction Guarantees – SWB will sign a Comprehensive Agreement and will guarantee a fixed price and completion date.

Institutional and Public Support - Testimony provided during the preparation of the MIS and the EIS, discussions with governmental, private sector groups and individuals indicate overwhelming support for the project at all levels. Most see it as needed now. The project is supported by:

- Metropolitan Planning Organization
- Hampton Roads Third Crossing Commission
- Commonwealth Transportation Board
- Hampton Roads Partnership
- Hampton Roads Chamber of Commerce
- U.S. Military
- Virginia Port Authority
- Hampton Roads Maritime Association

SWB will initiate a public information program in coordination with VDOT to assure that all interested parties are provided information and given opportunities to ask questions and provide meaningful comments. All available communication techniques will also be used to keep the general public informed.

Construction Process – The SWB Team will manage the construction process to ensure that it is consistent with established VDOT standards and practices. The maintenance of traffic plans will assure that an adequate number of lanes will be maintained throughout the construction period. Construction will be primarily over water on a new alignment and is expected to have minimal traffic impacts. The proposed accelerated design-build schedule will further reduce traffic impacts while providing a greatly enhanced facility in significantly less time than the design-bid-build process originally planned by VDOT.

QC/QA Process – SWB Team members are thoroughly familiar with VDOT's quality control and quality assurance requirements. SWB will develop a project specific Design Quality Management Plan and a Quality Assurance/Quality Control Inspection Program. The new crossing will reflect the attention to detail and quality that is inherent in the transportation projects that the team has designed and constructed in the past.

Small, Women and Minority-Owned Business (S/W/M) Participation – SWB has developed the following approach for involving S/W/M owned businesses:

- Actively solicit the involvement of S/W/M owned firms via announcements and notices published in local and regional construction journals and other periodicals.
- Set aside scopes of work for S/W/M owned firms and encourage them to participate in the pre-qualification process and bidding opportunities.
- Utilize S/W/M owned businesses who have a long standing relationship with SWB team members.
- Include provisions regarding S/W/M compliance in all subcontracts.
- Review the SWB Team's progress, attaining the S/W/M goals, on a regular basis.

Business Plan – SWB has developed a financial plan that is included in TAB 3. This preliminary plan presents a realistic approach based on conservative assumptions to financing the Third Hampton Roads Crossing. The plan is based on financing the project by means of tax-exempt toll revenue bonds, augmented by funds from public sources. The total cost of the facility will be between $2.5 billion and $ 4.0 billion and will require up to $1.8 billion in public funds. Toll levels and the amount of public funds required vary with the alternative selected. If the project is built in phases, public funds in the amount of approximately $0.5 billion plus a reasonable toll will provide the critical first two phases of the project.

Benefits of the SWB Plan - The benefits that are described by this conceptual proposal are a result of the evolution of the SWB Team's planning. A considerable effort has been made to develop a plan that is simple and straightforward while offering the most benefit to the public.

- The Third Hampton Roads Crossing is a multi-modal facility that incorporates an exclusive High Occupancy Vehicle/Bus Rapid Transit lane reserving space for the future addition of Light Rail Transit. This multi-modal solution provides a more flexible facility and extends the life and use of this transportation corridor.
- SWB will complete the crossing within 7 years after the Notice to Proceed, while the most recent VDOT plan was based on a 14-year period using the traditional design-bid-build contracting approach. This accelerated schedule will provide the vital traffic handling capacity that is needed now as well as the capacity to accommodate the regions continued demographic and economic growth.
- SWB's proposed public-private partnership approach significantly reduces the time and cost of the Third Hampton Roads Crossing. Simply put, **the use of private sector funding now saves over $1,000,000,000** compared to the current plan.
- The SWB plan provides the quickest solution to alternative hurricane evacuation routes and frequent road system incapacitations due to accidental occurrences.
- Adequate transportation infrastructure is provided to support the continued growth of the cities that surround the corridor and new maritime facilities such as the Craney Island port and the new Maersk Terminal.
- As an environmentally friendly solution, SWB's concept will reduce air pollution.
- An electronic toll collection system such as EZ-Pass or Smart Tag will be used to minimize the impact of toll collection on riders and permit implementation of variable pricing strategies.
- Design and construction contracts will emphasize use of local and regional firms.
- The SWB plan utilizes the most highly experienced team of world class contractors imaginable for the development, design and construction of the Third Hampton Roads Crossing.

1.a Organizational Approach

Identify the legal structure of the firm, or consortium of firms making the proposal. Identify the organizational structure for the project, the management approach and how each partner and major subcontractor in the structure fits into the overall team.

Legal Structure

Skanska USA, Inc. (Skanska), Washington Group International, Inc. (Washington), and Royal BAM Group nv (BAM) have formed the joint venture Skanska/Washington/BAM (SWB). SWB has been formed to develop, finance, design, build, operate and maintain the Third Hampton Roads Crossing. Skanska is the joint venture's managing partner. The project will be executed through the three firms' respective operating companies: Tidewater Skanska, Inc. (Tidewater), Washington Group International (Washington), and Flatiron Construction Corp. (Flatiron). Tidewater is the joint venture's operating manager. Joining SWB is the design team of Parsons Brinckerhoff Quade & Douglas, Inc. (PB) and Jacobs Civil, Inc. (Jacobs) (formerly Sverdrup), Goldman Sachs, who will be the financial advisor, and Kaufman & Canoles, P.C., the legal advisors. Collectively, this group of joint venture partners and designers is known as the SWB Team. The SWB Team members have experience working together to successfully execute large and complex projects. As the development proceeds, SWB may add additional partners and subcontractors to the team. A brief description of each SWB Team member is presented below.

Organizational Structure

- **Tidewater Skanska, Inc. (Tidewater)** of Norfolk, Virginia is a long-term VDOT contractor with a reputation for delivering outstanding marine and transportation facilities under budget and ahead of schedule. The firm's more notable projects include the construction of the award-winning Coleman Bridge, the original Chesapeake Bay Bridge Tunnel, the Hampton Roads Bridge Tunnel, the Cooper River Bridge in Charleston, SC, the new Woodrow Wilson Bridge Foundations, and the Pinners Point Interchange. Tidewater is a wholly owned subsidiary of Skanska. Skanska's financial strength and the broad capabilities of its subsidiary firms, together with those of the other team members, will make the dream of a Third Hampton Roads Crossing a reality.

- **Washington Group International (Washington)** of Boise, Idaho, is a leading transportation design-build firm with significant project development experience. The firm's construction history dates to 1912 with the founding of its heritage company, Morrison Knudsen. In joint venture with Interbeton, Washington Group built the Monitor Merrimac Memorial Bridge Tunnel (the second Hampton Roads crossing) and the Ted Williams Tunnel in Boston. Project development transportation projects include the E-470 Toll Road in Denver and the Pocahontas Parkway (Route 895) in Virginia. Washington's experience will be used in conjunction with that of the other Partners to provide the depth of capability needed for this project.

- **Flatiron Construction Corp. (Flatiron)** of Longmont, Colorado, is a subsidiary of Royal BAM Group nv of the Netherlands. Interbeton, Inc. (Interbeton), a Flatiron subsidiary, in joint venture with Washington, built the Monitor Merrimac Memorial Bridge Tunnel and the Ted Williams Tunnel in Boston. Interbeton also recently completed the widening of the Chesapeake Bay Bridge Tunnel trestles. Additionally, BAM has completed many submerged tunnels in Europe. BAM's financial strength and

experience will be used in conjunction with that of the other team members to provide the resources that will be required to undertake this project.

- **Parsons Brinckerhoff Quade & Douglas, Inc. (PB)** and **Jacobs Civil, Inc. (Jacobs)** are the premier marine tunnel and transportation designers in the United States. They have designed all of the tunnel and bridge-tunnel facilities in the Hampton Roads area and thousands of highways and bridges around the world. PB will draw upon its extensive environmental and permitting experience to perform any required permit applications or supplements to the environmental document. Additionally, the long and successful relationship that PB and Jacobs have with the other SWB Team members makes them the ideal firms to engineer and design the Third Hampton Roads Crossing.

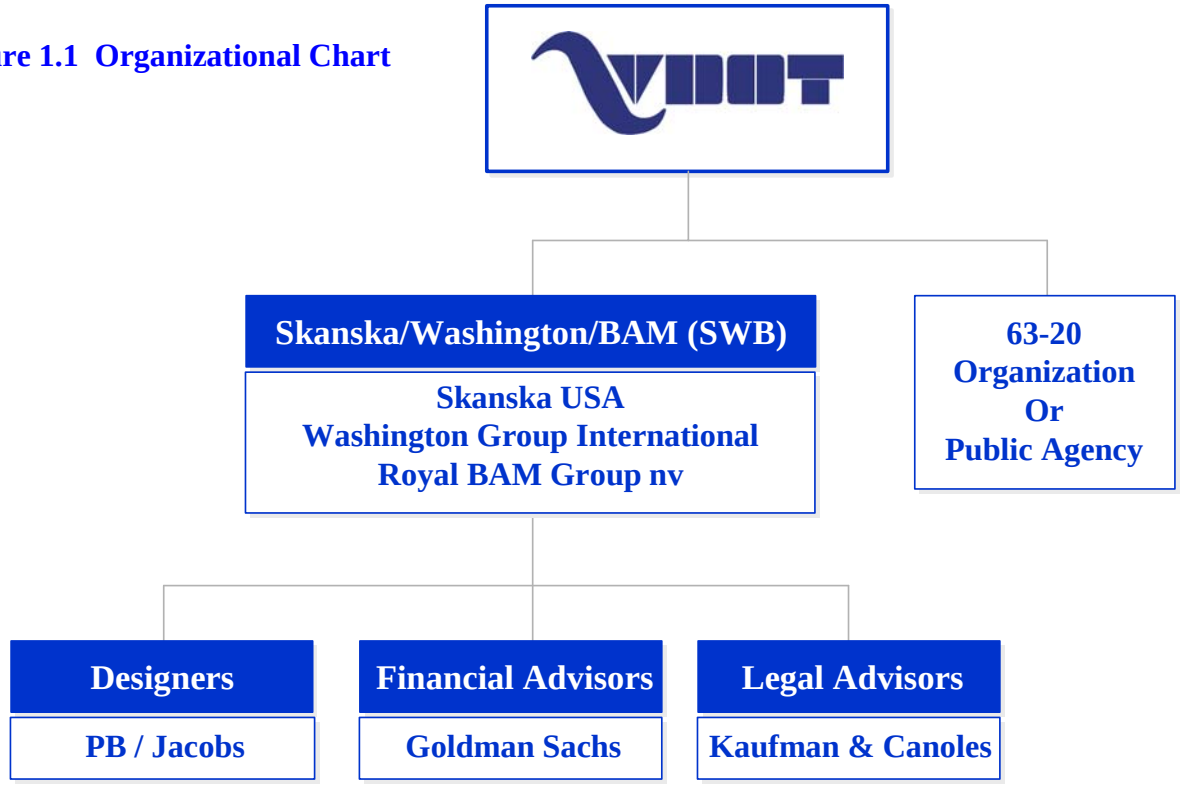
- **Goldman, Sachs & Co. (Goldman Sachs)** is one of the nation's largest, most diversified and most highly regarded investment banks. The firm was founded in 1869 as a dealer of commercial paper, a product Goldman Sachs created. Since the firm's founding, it has expanded to over 22,000 employees located in 67 regional offices in 24 countries. It's Municipal Bond Department, established in 1951, is part of the firm's Fixed Income, Currency and Commodities Division and is a leader in transportation finance. The Department consists of 130 dedicated municipal bond professionals who coordinate their activities to underwrite and distribute municipal securities and maintain a liquid secondary market for issues the firm manages.

- **Kaufman & Canoles, P. C. (K&C)** is a full-service commercial law firm with offices in Virginia Beach, Chesapeake, Hampton, Newport News, Norfolk, Richmond and Williamsburg with over 125 attorneys. K&C has been a nationally recognized firm in the area of tax-exempt and public finance since 1974 and has served as either bond counsel, underwriters counsel, issuer counsel or borrowers counsel in hundreds of financing. The firm has participated in unsolicited proposals under the Public-Private Transportation Act and financings which resulted therefrom, either directly or indirectly, including the Commonwealth's Route 28 improvements in Loudoun and Fairfax Counties and the Chesapeake Toll Road. The firm has experience in arranging, structuring and coordinating all aspects of public-private projects and economic development initiatives.

Figure 1.1, Organization Chart, shows the proposed organizational relationships between the Virginia Department of Transportation (VDOT), the three SWB joint venture partners, and the designers, PB and Jacobs and the financial advisors, Goldman Sachs.

1.a Organizational Approach

Figure 1.1 Organizational Chart



The SWB Team members are all recognized leaders in the engineering and construction industry, as demonstrated by current rankings by Engineering News-Record (ENR) shown on Table 1.1. These firms are also among the world's oldest and largest companies in the industry. Their experience in the region is unparalleled; having been involved with all of the tunnels and bridge-tunnels in the Hampton Roads area. Fortune magazine has selected Skanska AB, the parent company of Skanska, USA, as the most admired company in the world in the category of Engineering and Construction. The ratings were based on quality of management; quality of products and services; innovativeness; long-term investment value; financial soundness; ability to attract, develop and retain talent; community responsibility; and use of corporate assets.

Table 1.1 *Engineering News-Record* Rankings

ENR Category	SWB Team Member/Ranking				
	Skanska	Washington	BAM	PB	Jacobs
Domestic Construction	6	9	95		
International Construction	1	35	36		
Transportation	4	10	15	3	5
Bridges	2		4	4	3
Highways	4	7	15	2	5
Design		20		11	4

Management Approach

SWB's management approach is a clear, comprehensive plan to develop the Third Hampton Roads Crossing. The plan addresses the managerial, financial, technical, legal, environmental, and construction requirements for the project.

Program Manager - The SWB executive committee will appoint a program manager to manage the project with the guidance of the managing partner, Skanska. To support the program manager, SWB will have a full-time and integrated staff consisting of experienced, qualified personnel from the joint venture team members. This staff will award contracts for planning, design and construction services to augment the services that will be provided by the operating companies. SWB will function as an integrated staff without any company affiliation under the direction of the program manager.

Project Office - The cornerstone of SWB's approach is partnering with a strong emphasis on communication. SWB will facilitate communication by establishing a Project Office that co-locates the design, public information and construction management staffs of SWB and VDOT. All decision-makers will be co-located in one office to promote their interaction, which has been crucial to our successful completion of many other large projects.

Design Management Approach

Design Team - PB will lead the design team. PB will make extensive use of the broad experience and depth of its engineering and design organization, the largest transportation engineering staff in the U.S. Jacobs will also provide engineering and design personnel to augment the design team. The combined resources of PB and Jacobs represent an enormous technical capability with extensive experience in bridge and tunnel design.

Preliminary Engineering – Preliminary engineering activities will be performed by PB/Jacobs. SWB will provide constructibility reviews (including safety) throughout the preliminary engineering effort to identify practical and expedient construction approaches that will shorten schedules and lower construction costs. SWB will develop realistic construction cost estimates based on its team members' local marine and heavy civil construction experience. This interactive design team will prepare construction cost estimates and schedules that will be used for the Plan of Finance and the Comprehensive Agreement.

Design Management Plan – SWB will develop a Design Management Plan (DMP) within three weeks of receipt of the notice-to-proceed. The DMP will include procedures and processes that take advantage of the SWB Team's design-build experience. The DMP will promote the efficient execution of the design effort. Lessons learned in implementing DMPs for previous design-build projects will contribute to an efficient, effective management plan for the Third Hampton Roads Crossing. The DMP will prescribe a number of measures to control the design including:

- Clearly defining the scope of services for each subconsultant. Each subconsultant will be managed by an assigned manager.
- Developing of detailed design schedules, consistent with the project's master schedule, for use in managing the development and production of all construction packages.

- Ensuring that design quality control will be an integral part of the design management process by reflecting the procedures outlined in the Design Quality Management Plan.
- Enhancing coordination and communication with a local area network (LAN) that provides e-mail and access to standard software, as well as design documents as they are developed.
- Providing guidance for advance planning requirements to define each construction package.
- Outlining communication procedures with VDOT and other public agencies.

Work Plans - Work plans will be prepared for each design element. A project-specific work plan, including detailed tasks for each construction package, will be prepared concurrently with the DMP. The work plans will define managerial and technical approaches that will be used for the engineering and design of each package. The plans will define the scope of services, staffing requirements, tasks and their objectives, deliverables, coordination requirements, permitting requirements, lead times, budgets, schedules, and reporting procedures relative to each package.

Construction Management Approach

SWB's construction management concept takes full advantage of the team's strong local presence and experienced construction supervisors. Over the years, the SWB members have developed excellent relationships with local suppliers and subcontractors.

Safety - SWB's construction concept enhances safety performance by placing safety technicians in the field to monitor the construction activities of our crews and subcontractors. Safety is a top priority. The SWB Team's construction safety manager will report to the program manager.

Task Forces - The Project Office will house all members of the task force groups that are responsible for constructing the crossing. The construction supervisors will be active participants in the task force groups to facilitate the development of effective and efficient designs. The design team project engineers and design discipline leads will assume a leadership role. Task force meetings will be convened on a regular basis to coordinate construction requirements and collaborate on design decisions. The task forces will also facilitate constructibility by reviewing the construction packages prior to each formal design review.

Task-specific Work Plans - The development of task-specific work plans by the superintendent that is supervising each construction operation is another cornerstone of SWB's construction approach. These detailed work plans will include a work plan narrative, schedule, budget, staff-hour factors, quality specifications, safety procedures, and testing methods for each operation. SWB's construction approach requires the safety, quality, and the production staffs to review these plans before construction begins. The goal is to increase quality, lower cost, and raise productivity.

Constructability - Constructability is built into our construction concept through constructability reviews and regular construction planning meetings. All field representatives attend these meetings, including production supervisors, subcontractors, quality and safety personnel, and the construction management staff. Three-week look-ahead schedules are coordinated during these meetings. These schedules focus on the current week and following two-week period.

Permitting - The SWB Team will establish a permit task force to address all Commonwealth, federal, and local requirements. This task force will interface with public agencies to obtain permits in a timely manner and will serve as the focal point to resolve any permit compliance issues.

Public Information Program

SWB's approach to public outreach is to use education and information to maintain a high level of communication. SWB's two primary public information goals will be to (1) gain and maintain public support for the Third Hampton Roads Crossing and (2) to provide the support needed for the public to deal with construction concerns on a daily basis.

It is SWB's experience that when the traveling public is aware of potential impacts, knows what is happening, and why, how, and when it will happen, they are more apt to maintain positive opinions regarding construction. SWB's public information team will apply this approach to it's interaction with residents, businesses, commuters, local governments, the Department of Defense, and Virginia Port Authority. SWB will also use this approach to assist VDOT counterparts to inform the traveling public. Public information goals will be accomplished by: establishing and maintaining clear and open lines of communication with internal teams and external audiences; meeting public information needs through the media, public meetings and a project web site; and providing accurate information through other audience-appropriate distribution methods. Interaction with neighborhoods and businesses impacted by SWB's construction activities will occur via communication between the public information specialists and the production crews. As issues/concerns are brought up through a project website or hotline, the public information specialist will interact with the production crews to develop appropriate resolutions.

Plan of Finance

The SWB Team's financial consultant will prepare a Plan of Finance that includes sources and uses of funds. A preliminary Plan of Finance is provided in TAB 3. This plan will be refined as more information becomes available during the Detailed Technical Proposal Phase.

Non-Recourse Toll Revenue Bond Sale

SWB's approach to funding includes the sale of non-recourse toll revenue bonds. This is a common approach that is used for funding transportation improvement throughout the U.S. SWB is prepared to create, in conjunction with VDOT, an IRS 63-20 not-for-profit private corporation or a public agency, for such a sale. SWB services would include supporting the 63-20 or public agency in the bond rating process as well as the bond underwriting and sale.

Comprehensive Agreement

SWB will execute a Comprehensive Agreement with VDOT for the development rights associated with the Third Hampton Roads Crossing, subject to the mutual satisfaction of both parties regarding the terms and conditions. SWB will agree to the contract amount and assume liability for the project's design and construction. As a public-private venture, VDOT will be responsible for providing services including design reviews, right-of-way acquisition coordination, assistance with permitting, coordination with the Federal Highway Administration, and quality assurance acceptance activities.

Contracting Opportunities

Each of the world-renowned companies that constitute the SWB Team relies upon subcontractors to provide specialty services for selected portions of the work. Based on the team members' experience and extensive current operations in the Hampton Roads area, the SWB Team anticipates awarding subcontracts for the following construction specialties:

- Tunnel segment fabrication
- Pre-cast concrete members
- Right-of-way services
- Electrical
- Mechanical
- Dredging
- Tug boat support
- Concrete
- QA/QC
- Diving
- Reinforcing steel
- Slurry walls
- Rip-rap and gravel
- Equipment rental
- Earthwork and paving
- Public relations
- Specialty design
- Utility relocation
- Metal finishes
- Traffic management system

Early indications are that there will be a sufficient number of subcontractors available within the region to meet the majority of subcontracting needs. It is expected that subcontracts will be competitively awarded based on price and capabilities.

The SWB Team is particularly sensitive to contracting with minority and women-owned firms. To broaden the level of participation of these firms, SWB will conduct workshops and provide written notice to all known minority and women-owned firms that specialize in the work that SWB will be subcontracting. Drawings and specifications will be available to all minority and women-owned firms that express an interest in bidding opportunities. SWB will negotiate in good faith with all potential subcontractors.

Describe the experience of each firm and the key principals involved in the proposed project. Describe the length of time in business, business experience, public sector experience and other engagements of the firm(s). The lead organization must be identified.

Team Experience

Skanska USA, Inc. (Skanska), Washington Group International (Washington), and Royal BAM Group nv (BAM) have formed the joint venture Skanska/Washington/BAM (SWB). SWB has been formed to undertake the development, financing, design, construction, operation and maintenance of the Third Hampton Roads Crossing. The SWB lead organization and the managing joint venture partner is Skanska. Skanska's wholly owned subsidiary, Tidewater Skanska, Inc. will be the operating manager.

- **Skanska AB** (Sweden) founded 1887
  Skanska USA founded 1971
  Tidewater Skanska, Inc. founded in 1932 as heritage company Tidewater Construction Corporation

- **Washington Group International** founded 1912 as heritage company Morrison Knudsen

- **Royal BAM Group nv** (Netherlands) founded in 1869
  Flatiron Construction Corp. established in the United States in 1970
  Interbeton established in the United States in 1986

The SWB Team firms are international leaders of the construction industry, and have successfully built thousands of projects for both the public and private sectors. Their reputations and experience have earned them financial stability and unsurpassed capabilities that are crucial to the development of the Third Hampton Roads Crossing.

SWB was formed to bring together the country's premier companies with experience in the design and construction of complex bridges and tunnels. SWB selected the most experienced engineering and design team in the world, Parsons Brinckerhoff Quade & Douglas, Inc. (PB) and Jacobs Civil, Inc. (Jacobs), for this type of facility. These companies, which together with Goldman Sachs as financial advisor, collectively compose the SWB Team, have long-standing working relationships. The team's capabilities are ideally suited to solve the pressing need for a Third Hampton Roads Crossing.

The operating companies of the three joint venture members will self perform a substantial amount of the construction. Tidewater, Washington, and Flatiron have the demonstrated experience and capability to develop the Third Hampton Roads Crossing. These firms have consistently proven their capability to accomplish difficult projects within time and budget constraints.

Table 1.2, Representative Submerged Tunnel Projects, provides a list of similar facilities that have been designed and/or constructed by SWB Team members. This table illustrates the depth of the teaming experience on similar projects, and also clearly indicates that one or more of the SWB Team member firms have designed or built all of the bridge-tunnels in the Hampton Roads area.

Table 1.2 Representative Submerged Tunnel Projects

Tunnel	Year Completed	Skanska	Washington	BAM	PB	Jacobs
Hampton Roads Area						
Hampton Roads Bridge Tunnel #1	1957	◆			◆	
Hampton Roads Bridge Tunnel #2	1976				◆	
Monitor Merrimac Memorial Bridge Tunnel	1992		◆	◆		◆
Downtown Tunnel #1	1952				◆	
Downtown Tunnel #2	1988				◆	
Midtown Tunnel #1	1962				◆	
Chesapeake Bay Bridge Tunnel #1	1964	◆				◆
Other Locations						
Ft. McHenry Tunnel	1986	◆			◆	◆
Ted Williams Tunnel	1995		◆	◆	◆	◆
BART Tunnel	1966	◆			◆	
Tunnel de Noord, Netherlands	1992			◆		
Willemspoor Tunnel Netherlands	1994			◆		
Alphen aan den Rijn, Netherlands	1997			◆		
Conway Tunnel, Wales	1991			◆		
Medway Tunnel, UK	1995			◆		

Firm Experience

Tidewater Skanska, Inc. (Tidewater) of Norfolk, Virginia, is a wholly-owned subsidiary of Skanska USA which is owned by Skanska AB. Skanska has over $5 billion in assets, employing in excess of 60,000 people in over 50 countries. Total sales in 2004 were approximately $14 billion, of which 85 percent was construction. Skanska USA was established in 1971 and recorded 2003 sales of over $5.6 billion. Skanska USA is the sixth largest U.S. construction contractor. Tidewater is a wholly-owned subsidiary of Skanska USA and will act as the lead organization in executing the design-build delivery approach for this project. Skanska's representative projects include:

▪ Chesapeake Bay Bridge Tunnel, VA	$200M
▪ Hampton Roads Bridge Tunnel, VA	$48M
▪ Oresund Link: Sweden-Denmark Bridge Tunnels	$758M
▪ Bart Submerged Tunnel, San Francisco, CA	$180M
▪ Coleman Bridge, Yorktown, VA	$73M
▪ Berkley Bridge, Norfolk, VA	$75M
▪ BART Extension to San Francisco Airport, CA	$526M
▪ Light Rail (Air Train) at JFK Airport, NY	$1300M
▪ Richmond - San Rafael Bridge, CA	$485M
▪ Ft. McHenry Tunnel, Baltimore, MD	$850M
▪ Woodrow Wilson Bridge, Alexandria, VA	$130M
▪ Pinners Point Interchange, Portsmouth, VA	$145M
▪ Cooper River Bridge, Charleston, SC	$550M
▪ I-495/US 1 Interchange, Alexandria, VA	$147M

Washington Group International (Washington) is headquartered in Boise, Idaho, and has a history dating back to 1912 with the founding of its heritage company, Morrison Knudsen. Today, Washington is an international engineering, construction, and construction management company offering public and private clients a full range of services—engineering, self-performed construction, construction management, program management, operations and maintenance, and development programs—through six operating units: Infrastructure, Power, Energy and Environment, Defense, Industrial/Process, and Mining. With annual revenues exceeding $3 billion, Washington has approximately 27,000 employees at work in 40 states and more than 30 countries. Washington's representative transportation projects include:

▪ Monitor Merrimac Memorial Bridge Tunnel, Hampton Roads, VA	$138M
▪ Ted Williams submerged tunnel, MA	$251M
▪ I-15 Corridor Reconstruction, UT	$1380M
▪ E-470 Toll Road Design-Build, CO	$568M
▪ Route 895 Pocahontas Parkway, VA	$322M
▪ Hudson-Bergen Light Rail System, NJ	$1670M

Flatiron Construction Corp. (Flatiron) is a wholly owned subsidiary of Royal BAM Group nv (BAM), which was founded in 1869 and currently employs over 30,000 people. BAM has over $8 billion in annual sales. Flatiron will be the operating company for BAM in executing this project. In addition to having constructed over 50 submerged tunnels and highways in Europe, BAM's recent U.S. projects include:

- Chesapeake Bay Bridge Tunnel Parallel Crossing $220M
- Ted Williams submerged Tunnel, Boston, MA $251M
- Eastern Transportation Corridor, Orange County, CA $772M
- Carolina Bays Parkway, Myrtle Beach, SC $240M
- Monitor Merrimac Memorial Bridge Tunnel, Hampton Roads, VA $138M
- Cooper River Bridge, Charleston, SC $550M

Parsons Brinckerhoff Quade & Douglas, Inc. (PB) and **Jacobs Civil, Inc. (Jacobs)** have been selected to serve as the engineer-of-record based on the firms' experience gained by successfully engineering similar projects and their working relationships with the operating companies. PB was founded in 1885 and currently employs 9,000 people in 250 offices worldwide. Their portfolio includes the completion of 40 submerged tunnel projects. For 86 years, Jacobs has participated in and has a proven track record in the planning, design, and construction supervision of tunnels, shafts and major underground transportation projects within the USA. Jacobs has 27,000 employees worldwide. This project will be built on a develop-finance-design-build-operate and maintain basis, a delivery approach that is familiar to both firms. PB's and Jacob's representative projects include:

- Fort McHenry Tunnel, Baltimore, MD $850M
- Monitor Merrimac Memorial Bridge Tunnel, Hampton Roads, VA $138M
- Ted Williams Submerged Tunnel, Boston, MA $251M
- Chesapeake Bay Bridge Tunnel, VA $260M
- Second Downtown Elizabeth River Tunnel, Norfolk, VA $300M
- Coleman Bridge, Yorktown, VA $73M
- Cooper River Bridge, Charleston, SC $550M

Key Project Personnel

- **David J. Eastwood, PE** – Senior Vice President of Skanska USA; Chairman and CEO of Tidewater Skanska, Inc. David Eastwood has 37 years of construction and 23 years in executive management experience. He has been involved in all types of heavy construction in the United States, Britain, the Middle-East and Hong Kong.
- **Edwin W. McLaughlin, PE** – President of Tidewater Skanska, Inc. Ed McLaughlin has responsibility for operations and performance on this project. He has 45 years of diversified design and construction experience with focus on marine construction and bridges for the past 19 years.
- **Francis X. Watson, PE** – Project Director for Tidewater Skanska, Inc. Francis (Buddy) Watson is responsible for managing the project team for the SWB joint venture. He has 39 years of diversified hands-on experience managing design, construction, contracting operations and facilities maintenance.
- **Frank Finlayson** – Senior Vice President, Project Development, Washington Group International. Frank Finlayson has 19 years of project financing experience, specializing in the management of private-sector financing efforts for public/private partnerships in infrastructure-related markets. He is responsible for directing all financing and business-related activities in negotiations with the public sector and private debt markets. He also works with state and local government officials to implement public-sector requirements with that of the private sector.

- **Rich Linford** – Senior Vice President, Design-Build Operations, Washington Group International. Richard Linford has 29 years of experience in the construction industry with expertise in project management and operations. He has extensive experience managing complex design-build highway projects and interfacing with government agencies, the public, and other project stakeholders.
- **Dirk Langerbroek** – Managing Director of Interbeton. Dirk Langerbroek has over 30 years of engineering and construction experience.
- **Geoff D. Collins** – Executive Vice President, Interbeton, Inc. Geoff Collins has over 33 years of engineering and construction experience including serving as the Chief Engineer for the Ted Williams Tunnel in Boston.
- **William D. Smith, PE** – President of Parsons Brinckerhoff Quade & Douglas, Inc. Bill Smith has 39 years of experience in engineering and design management. He joined PB in 1988 after serving in various positions for global consulting firms.
- **William Allen, PE** – Senior Vice President, Transportation Group, Jacobs Civil, Inc. Bill Allen has over 30 years of engineering and design experience related to all types of facilities. He has extensive experience in privatization and design-build approaches to complete transportation facilities.

The projects described on the following pages are representative of the depth of experience and capability that the SWB Team members bring to the Third Hampton Roads Crossing. These projects demonstrate a strong performance record and depth of our teaming experience. References are provided for each project.

GEORGE P. COLEMAN BRIDGE REPLACEMENT

Yorktown, Virginia

This double-leaf swing span over the York River is the second longest in the world. Although procured by VDOT under traditional design-bid-build procedures, Tidewater Skanska, Inc. (Tidewater) managed a significant engineering effort that allowed for construction of six 77-foot-wide bridge spans, complete with barriers, lighting, signs, and highway markings to be prefabricated 30 miles downstream in the Hampton Roads.

In May 1996 during a 12-day scheduled bridge closure, the existing bridge spans were lifted and removed by barges utilizing an elaborate pumping system and replaced with the new wider bridge spans. Within nine days, the Coleman Bridge was open to the public, three days ahead of schedule. The project received six construction/design awards for this major accomplishment and was featured on the July 8, 1996 *ENR* cover.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Tidewater scope of work included project management, quality assurance, redesign of truss and shoring systems, bridge construction, and electronic toll collection system. Parsons Brinkerhoff was the project designer.

PROJECT COST:
$73 million

COMPLETE DATE:
August 1996

REFERENCE:
Virginia Department of Transportation
George Clendenin, State Structure and Bridge Engineer
1401 E. Broad Street
Richmond, VA 23219
(804) 786-2714

CAROLINA BAYS PARKWAY

Myrtle Beach, South Carolina

The Carolina Bays Parkway is a design-build project that connects SC Route 9 to US Route 501 in Horry County. The Parkway involves 22 miles of limited access divided highway with 26 bridges including one over the Intracoastal Waterway.

This unusual procurement required proposers to provide the maximum amount of scope for a fixed budget. Palmetto Transportation Constructors not only provided all the scope on the SCDOT's' list, but offered additional scope items to enhance the entire area transportation system.

A significant amount of right-of-way is being procured by the design/build contractor as well as by SCDOT. The contractor is responsible for managing the entire process. The contractor is also managing relocation of existing utilities.

Protection of the fragile low country environment was given a high priority. Design and construction were fast tracked with an overall schedule of 30 months. Some sections were completed early and turned over to SCDOT and the motoring public.

Extensive use was made of contractors and suppliers in the Myrtle Beach area.

ACTIVITIES FOR WHICH THE FIRM IS RESPONSIBLE:

Flatiron Structures Co., a wholly owned subsidiary of Royal BAM Group, and Tidewater Skanska, Inc. formed the Palmetto Transportation Constructors, and were awarded this design-build project.

PROJECT COST:

$254 million including exercised options

COMPLETION DATE:

2002

REFERENCE:

South Carolina DOT
ATTN: Berry Still, Project Manager
P. O. Box 191
Columbia, SC 29201
(803) 737-9967

PARALLEL CROSSING – CHESAPEAKE BAY BRIDGE TUNNEL
Cape Charles, Virginia

Interbeton and Jacobs (Sverdrup) were both involved in this parallel crossing of the Chesapeake Bay consisting of 12 miles of low-level trestle over the mouth of the Chesapeake Bay, a high-level bridge across the northern navigation channel, as well as 3 miles of on-shore highway work. The parallel crossing required over 2000 precast, prestressed, concrete cylindrical piles, over 600 precast, reinforced concrete pile caps and over 2000 precast, prestressed double "T" deck units. Most of this precast concrete was manufactured at a purpose-built on-site facility. The contract included refurbishment of the original crossing and all the work was completed in four years per the original contract.

ACTIVITIES FOR WHICH THE FIRMS WERE RESPONSIBLE:
Interbeton was part of a construction joint venture to build the parallel crossing of the Chesapeake Bay Bridge. Interbeton set up and ran the precast yard, drove piles, and erected precast concrete deck units. Interbeton also installed electrical and electronic services as well as performed partial demolition and refurbishment of the existing bridge.

In the 1960s, Jacobs provided planning, design and construction management services for the first crossing. Jacobs provided comprehensive construction management services for the total 17.5 mile-long crossing which includes the 12 miles of precast, prestressed concrete trestle, along with four man-made islands in open water, two sunken tube tunnels, two high-level bridges, and a 8,319 foot causeway. In 1995, Sverdrup provided similar services for the parallel bridge crossing.

PROJECT COST:
$220 million

COMPLETION DATE:
July 1999

REFERENCE:
Chesapeake Bay Bridge Tunnel District
Attn: Paul Burnette, Jr.Chief Engineer
32386 Lankford Highway
Cape Charles, VA 23310
(757) 331-2960

"TED WILLIAMS" BOSTON HARBOR TUNNEL

Boston, Massachusetts

A Washington Group-led joint venture with Interbeton constructed twin-tubes highway tunnels beneath Boston harbor between Logan Airport and South Boston. This $251 million, 3,850-foot-long immersed tube tunnel consisted of 12 sections of double-tube (binocular) steel concrete lined segments that were placed in a harbor bottom trench.

The tube segments were fabricated at Sparrows Point, Maryland, where they were lined and weighted with concrete and sealed with bulkheads. The segments were then loaded on a submersible barge and towed to the Boston Inner harbor. After removal from the barge, each segment was placed in a 90-foot-wide trench dredged to a minimum depth of 95 feet at mean low water. Approximately, 1,057,000 cubic yards of material was dredged from the harbor bottom. After tube placement, the trench was backfilled with a minimum of 5 feet of cover.

ACTIVITIES FOR WHICH THE FIRMS WERE RESPONSIBLE:

Washington Group and Interbeton were responsible for all construction work. PB prepared concept designs and served as GEC to the Turnpike Authority

PROJECT COST:

$251 million

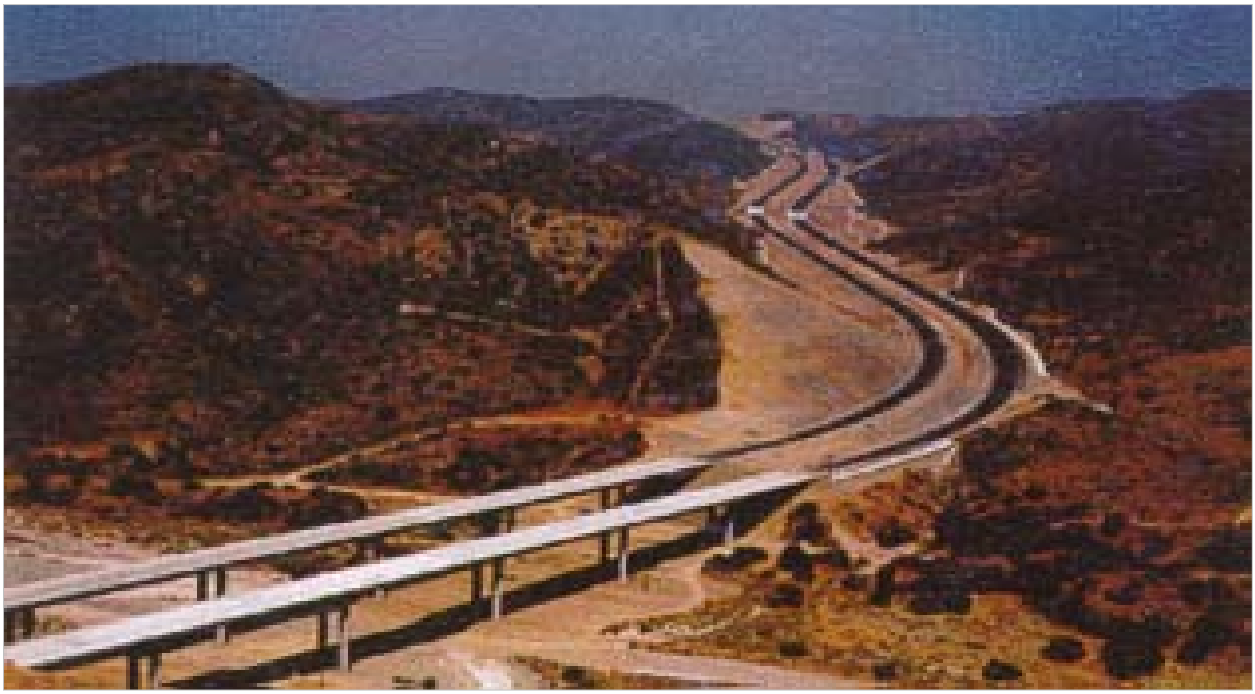
COMPLETE DATE:

1994

REFERENCE:

Massachusetts Turnpike Authority
Joseph J. Allegro
10 Park Plaza
Boston, MA 02116
(617) 342-1226

EASTERN TRANSPORTATION CORRIDOR
Orange County, California



The Eastern Transportation Corridor (ETC) is a 40-km four/six lane new limited access toll road in Orange County, California. The owner is the Foothill/Eastern Transportation Corridor Agency (TCA), a California Joint Power Agency. The ETC facility includes four fully directional interchanges, a sophisticated traffic management system, and a state-of-the-art toll collection and violation enforcement system, including full-speed electronic toll collection. The project was approved under the Federal Highway Administration's Special Experimental Project (SEP-14) as a design-build project.

The project included four fully directional interchanges, 69 bridges, placement of 1.3 million tons of asphalt and moving 67 million cubic yards of earth and rock.

The project was financed with private capital raised through $1.4 billion in tax-exempt bonds issued by the TCA. The bonds were placed in approximately one hour, based in part on the fixed price and guaranteed completion date proved by the construction joint venture.

ACTIVITIES FOR WHICH THE FIRM IS RESPONSIBLE:
Flatiron led a joint venture to design and build the Eastern Transportation Corridor. Additionally, the joint venture was responsible for all toll equipment. Quality assurance and quality control were provided by the contractor for the entire project.

PROJECT COST:
$801 million

COMPLETION DATE:
February 1999 (14 months ahead of schedule)

REFERENCE:
Foothill Eastern Transportation Corridor Agency
Gary H. Steinke
201 E. Sandpointe, Suite 200
Santa Ana, California 92707
(949) 513-3437

MONITOR MERRIMAC MEMORIAL BRIDGE-TUNNEL
Newport News, Virginia

The Washington Group-led joint venture with Interbeton Inc. constructed the submerged tube tunnel between Newport News and Suffolk, Virginia. The $138 million submerged tube tunnel is 4,500 feet long and consists of 15 sections of double-tube steel segments.

The tube segments were fabricated, lined and weighted with concrete, sealed with bulkheads at Sparrows Point, Maryland, then towed to the Hampton Roads site. Each segment was individually placed in a 90-foot-wide trench dredged to a maximum depth of 120 feet at mean low water. After tube placement, the trench was backfilled with a minimum of 5 feet of cover. Sverdrup designed the tunnel and provided construction services. Tidewater Skanska, Inc. built the northern approach to the tunnel.

ACTIVITIES FOR WHICH THE FIRMS WERE RESPONSIBLE:
SWB Team members were responsible for all phases of design and construction.

PROJECT COST:
$138 million

COMPLETE DATE:
1990

REFERENCE:
Virginia Department of Transportation
Thornhill Snoddy
1401 E. Broad St.
Richmond, VA 23219
(804) 786-2945

I-95 TOLL CONNECTOR AND VIETNAM VETERANS MEMORIAL BRIDGE

Henrico and Chesterfield Counties, Virginia

The Pocahontas Parkway was the first construction project awarded under the Commonwealth of Virginia's Public-Private Transportation Act of 1995. The 8.8-mile parkway involved the financing, design, and construction of a four-lane limited-access highway with major interchanges at Interstate-295 in the east and Interstate-95 in the west. It also includes a high-level crossing over the James River south of Richmond, Virginia, providing clearance for ocean-going vessels bound for the Port of Richmond. Besides the nearly 9 miles of four-lane roadway and the James River Bridge, the project also includes construction of three interchanges, ten major overpasses and grade separation structures, and toll collection facilities.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:

Washington Group developed financing on the project, was a joint venture member, and served as the design-build contractor. Parsons Brinckerhoff was responsible for the design.

PROJECT COST:

$362 million

COMPLETE DATE:

September 2002

REFERENCE:

Virginia Department of Transportation
Jim Fariss, Project Manager
1401 E. Broad St.
Richmond, VA 23219
(804) 786-2998

INTERSTATE HIGHWAY 15 RECONSTRUCTION
Salt Lake City, Utah

This project involved demolishing and reconstructing approximately 17 miles of Interstate 15 through the heart of Salt Lake City, Utah. The $1.4 billion contract is Utah's largest ever public works project, and at the time was the largest design-build highway project underway anywhere in the U.S. Work included demolition and reconstruction of 144 bridges, half of which are steel girder and the remainder precast/prestressed girder structures carrying 4.5 million square feet of new concrete pavement to build four to six lanes of concrete highway in each direction. The work was conducted under a stringent time schedule for completion in time for the opening of the 2002 Winter Olympics.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
PB was the program manager for Utah DOT. PB was involved in all pre award activities and was responsible for design and construction oversight. Washington Group participated in this project as a design-build joint venture partner responsible for overall project execution and as a major project designer as part of the design joint venture.

PROJECT COST:
$1.4 billion

COMPLETE DATE:
May 2001

REFERENCE:
Utah Department of Transportation
John Njord, Director
4501 S. 2700 W.
Salt Lake City, UT 84119-5998
(801) 965-4113

POPLAR ISLAND RESTORATION PROJECT

Chesapeake Bay, Maryland

In April 2000, Tidewater Skanska, Inc. was awarded a $35.6 million contract with the U.S. Army Corps of Engineers for the construction of the Poplar Island Wildlife Habitat Restoration project. This project is located in the Chesapeake Bay, approximately 1½ miles from the closest point of landfall, near Tilghman Island, Maryland.

Tidewater constructed a system of stone and earthen dikes to reclaim Poplar Island from erosion and to create cells that will be filled with dredge material taken from shipping channels in the area. The resulting island was planted to establish upland and lowland environmental habitats for wildlife.

The work included building approximately 21,500 LF (4 miles) of stone and earthen dikes. Stone berms were first constructed along the toe of the proposed dikes. Material was dredged from the bottom of the bay and pumped into a specially prepared containment area. The sand was loaded to trucks, then placed and shaped to form the dikes. External faces of the earthen slopes are covered with multiple layers of graded stone to prevent future erosion.

The project includes spillway structures, stone roadways and subaqueous power and phone lines to the island. This project required approximately 2,000,000 cubic yards of fill and 300,000 tons of stone. The project was awarded on a best value procurement based on the price and a technical proposal.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Tidewater was responsible for all construction and quality control.

PROJECT COST:
$40 million

COMPLETE DATE:
December 2001

REFERENCE:
Scott Johnson
U. S. Army Corps of Engineers
Baltimore District Corps of Engineers
P. O. Box 1715
Baltimore, MD 21203-1715
(410) 962-6030

MASSACHUSETTS AVENUE INTERCHANGE

Boston, Massachusetts

A joint venture including Interbeton and Skanska was awarded the C 12A3 contract, which was located at the southern most end of the Central Artery/Tunnel project. The major challenge on this job was to work over, around, and through the major highway that carries traffic into downtown Boston without interrupting traffic. Work preparation and traffic management played a critical role in the execution of the project. The project consisted of:

- Construction of 18 new bridges (totaling 2.3 miles) consisting of 220 steel tub girders, 216 precast I-beams and 42 precast post tension concrete box beams.
- In total, 102,000 CY of concrete was poured
- Construction of 4.6 miles of at-grade roads
- Construction of two storm water pump stations

ACTIVITIES FOR WHICH THE FIRMS WERE RESPONSIBLE:

Interbeton, Skanska, and their joint venture partner were responsible for all construction work. PB provided GEC services to the owner.

PROJECT COST:

$200 million

COMPLETE DATE:

July 2001

REFERENCE:

Massachusetts Highway Department
Paul Dye
C/O Bechtel Parsons Brinckerhoff
185 Kneeland Street
Boston, MA 02127

NEW CARQUINEZ BRIDGE
Crockett, California

As part of a joint venture, Interbeton Inc. constructed this new suspension bridge across the Carquinez Strait navigation channel. The joint venture members include two sister companies, FCI Constructors North and Flatiron Structures Company.

The new Carquinez structure is the third bridge at this site and replaces the existing bridge, built in 1927, and carries traffic westbound on I-80. The bridge built in 1958 was seismically retrofitted and carries I-80 traffic eastbound. The three-span, 3,465-foot-long structure is the nation's first new major suspension bridge built in 35 years. The bridge features two 400-foot concrete towers, supported by driven piles. The new 82-foot-wide deck accommodates four vehicle lanes (including one HOV lane), a bicycle/pedestrian lane, and wide shoulders.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Interbeton, Flatiron and their joint venture partner were responsible for all construction work.

PROJECT COST:
$231 million

COMPLETE DATE:
2003

REFERENCE:
Caltrans
Kenneth Loncharich
C/O Caltrans Toll Bridge Program
Hilltop Construction Field Office
3045 Research Drive
Richmond, CA
(510) 262-6808

SOUTH BOSTON INTERCHANGE

Boston, Massachusetts

The South Boston Interchange (Contract C01A6) is part of the Boston Central Artery / Tunnel Project executed by the Massachusetts Highway Department. The project is located in South Boston and is part of the I-90 Massachusetts Turnpike extension to Logan Airport.

This contract borders two other Central Artery / Tunnel contracts. The work included the construction of a reinforced cut-and-cover tunnel with a length of 1,250 feet, a width varying between 280 and 330 feet, and an excavation depth of approximately 50 feet.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Interbeton Inc. and Flatiron were responsible for the cast-in-place tunnel sections, design and construction of earth retaining structures, temporary bridges, and dewatering systems. PB provided GEC services for the owner.

PROJECT COST:
$225 million

COMPLETE DATE:
2002

REFERENCE:
Massachusetts Highway Department
Chester Choy-Hee
C/O Bechtel / Parsons Brinckerhoff
273 Summer Street
Boston, MA 02111

I-93 / I-90 INTERCHANGE
Boston, Massachusetts

Interbeton, together with Slattery Skanska, a Skanska subsidiary, as part of a joint venture, constructed this project located at the intersection of I-93 and the eastern terminus of the Massachusetts Turnpike (I-90). It is the largest construction contract ever awarded by the Massachusetts Turnpike Authority. The joint venture used jacked-boxed tunnels under the active Amtrak rail lines at South Station; this method is the only means to construct tunnels under the tracks without interrupting rail service. The Project was completed in 2003.

Interbeton was awarded the National Value Engineering Award for best technical value engineering change proposal to Big Dig Contracts and was the Grand Award Winner of ACEC's 2000 Engineering Excellence Award, amongst various other national and international awards.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Interbeton and Slattery Skanska, in joint venture, were responsible for fabrication and construction of 10,000 feet of pre-cast, post-tensioned viaduct; construction of three jack-box tunnels with similar cross sections (80 feet wide by 40 feet high by 167, 258 and 379 linear feet); construction of 3,000 feet of cut-and-cover tunnel, and 3,700 feet of cast-in-place boat section. PB provided GEC services for the owner

PROJECT COST:
$420 M

COMPLETE DATE:
2003

REFERENCE:
Massachusetts Highway Department
Philip Rice
C/O Bechtel / Parsons Brinckerhoff
210 South Street
Boston, MA 02110

BAY AREA RAPID TRANSIT – TRANS-BAY TUBE

San Francisco, California

In 1966 Tidewater Skanska, Inc. and their joint venture Partners were awarded the $180 M contract for the construction of a submerged tunnel between San Francisco and Oakland, CA. The project involved fabrication, dredging, placement, and finishes for a 3.6-mile-long tunnel having a 48-foot by 24-foot cross section. The tunnel was placed in depths up to 135 feet below the water surface. The facility is in use to provide commuter rail services. The project was built to stringent seismic requirements. Parsons Brinckerhoff led the joint venture for design and construction management for the Trans-Bay Tube.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
The Tidewater Skanska Joint Venture was responsible for all construction between the Oakland and San Francisco tunnel portals. Parsons Brinckerhoff was the lead project designer.

PROJECT COST:
$180 million

COMPLETE DATE:
1970

REFERENCE:
Bay Area Rapid Transit Authority

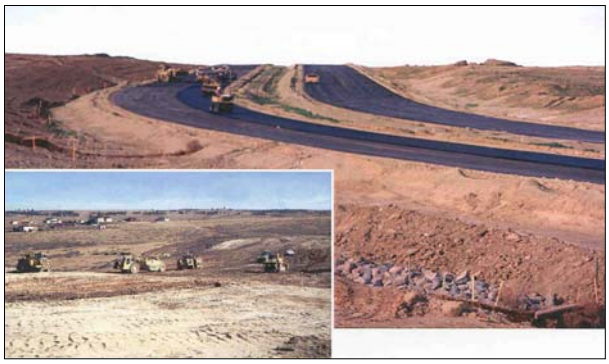
E-470 TOLL ROAD DESIGN-BUILD PROJECT

Denver, Colorado

Washington Group's involvement with the E-470 project began in 1991. The E-470 Public Highway Authority contracted with Washington Group to create and implement a comprehensive development plan to finance, design, and build Segments II and III of the E-470 project. Working closely with the Authority, Washington Group designed a multi-tiered financing structure and conducted environmental, socioeconomic, and logistical studies to support the plan. Washington Group acted as the owner's agent to assist in arranging the financing, which consisted of long-term toll revenue bonds. The financing was secured solely through toll revenues and vehicle registration fees. The financing raised for the facility amounted to $658,829,600.

Washington, as sponsor of the Platte River Constructors, Ltd. (PlRC) joint venture, performed the design-build contract for Segments II & III including transportation planning, preliminary engineering, financial assistance, final engineering, construction, and construction management services. Washington Group (dba MK Centennial) is the engineer-of-record for the civil engineering and design of Segments II & III. Washington Group was instrumental in the redesign of the roadway to decrease project costs and enable the project to become financially feasible. We managed an extensive public involvement program and also provided conceptual design, evaluated alternative alignments, performed value engineering studies, and developed the toll revenue preliminary engineering in support of toll revenue studies.

As the managing partner/Design-Builder on Segments II and III, Washington Group constructed 12 interchanges and 33 bridges. Washington Group also constructed three mainline toll plazas and 16 ramp toll structures. Other work included 135 utility relocations, 2.9 acres of wetlands creation and mitigation, lighting, signing, and landscaping as well as design and installation of 60 lanes of electronic toll collection equipment. Washington Group self-performed grading, drainage work, paving, bridge construction, signage, and emergency services coordination and managed the subcontracted portions of the work. Washington Group also assisted in securing new right-of-way was for essentially the entire length of the project and managed hazardous materials encountered during construction. Segments II and III work was completed with over two million work hours and no lost-time accidents. The project received state and national quality award recognition for asphalt paving and state and local recognition for sensitivity to endangered species in the corridor, and no litigation or claims.



In January 2000, after a competitive bid process, a second Washington Group-led joint venture began work on Segment IV under a design-build contract. Segment IV is a 12.5-mile, four-lane, controlled-access toll road that skirts the northern edge of the Denver metropolitan area. Washington Group-led joint venture provided transportation planning, engineering and design, pre-construction, and procurement and construction services. Segment IV includes 7 interchanges, 43 bridges, 1 mainline and 8 ramp toll plazas. The roadway crosses various streets, county roads, and the major transportation arteries of I-76, US 85, and the BNSF and Union Pacific railroads. Wetlands replacement was also included in the project scope. Ongoing coordination was maintained with a wide spectrum of agencies and local jurisdictions to obtain the necessary permits and approvals for construction. Similar extensive coordination was undertaken with all utilities companies.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:

Washington Group was the Joint Venture Sponsor and provided project development assistance, design, and construction.

PROJECT COST:

$567 million for the two design-build contracts

COMPLETION DATE:

2003

REFERENCE:

E-470 Public Highway Authority
Matt McDole, Segments II & III
(303) 537-3470
Ed Delozier, Executive Director, Segment IV
(303) 537-3470

HUDSON-BERGEN LIGHT RAIL TRANSIT PROJECT

Hudson and Bergen Counties, New Jersey

Washington Group heads 21st Century Rail Corporation, a consortium contracted to design, build, operation and maintain (DBOM) the $1.8 billion Hudson-Bergen Light Rail Transit system. The Hudson-Bergen Light Rail Transit System is unique in two ways: it was the first DBOM project in the United States for a "transit" application, and it was the first time such a contract was awarded to a single consortium. The project team remains on schedule since construction began in December 1996 and the latest extension, 22nd Street Station, opened two years ahead of schedule. At completion, the 20.5-mile system will include 32 stations, six intermodal transfer sites, and six park-and-right lots and will serve over 100,000 riders daily.

Since its opening in April 2000, Washington Group has operated Hudson-Bergen Light Rail Transit System and maintained the infrastructure, rail system, stations and facilities. The operation and maintenance of the Light Rail Transit System will continue through April 2015.

Phase I, awarded in 1996 and completed in 2002, involved fast-track design and construction of the initial 9.5-mile segment. The first 7.5 miles of the light rail system went into revenue service in the spring of 2000. This initial Minimum Operating Segment (MOS-1) currently serves 17 stations (five of which are intermodal transfer locations), rail and bus transit, ferries, and another four stations with park and ride facilities. A maintenance complex was also constructed and includes a 100,000 square foot maintenance shop, a 75,000 square foot LRV storage building, and a storage yard.

The final build-out of MOS-1 involved a 4,000+ foot extension of the light rail. Although less than a mile in length, this final portion of the route presented many challenges due to the close proximity of NJ Transit's active Hoboken Terminal and Rail Yard to the north; the Hudson River to the east; the navigable Long Slip Channel to the south and west. The area was so restrictive that Washington Group provided a temporary access bridge across the Long Slip Channel to support construction.

In October 2000 Washington Group was awarded Phase II (MOS-2), which adds 6.1 miles and involves seven passenger stations including three intermodal stations, four park-and-ride facilities, a 1,000-foot viaduct, a 4,000-foot tunnel, and the construction and rehabilitation of 12 bridges. Washington Group has completed the design, plans, and specifications for these two extensions. In addition to managing subcontractors performing certain civil, electrical and tunneling work, Washington Group is self-performing the civil and architectural work for the light rail stations, as well as some of the rail systems work. Construction of the southern extension is complete and Revenue Service began in November 2003. The northern extension is scheduled to be complete and in Revenue Service by late 2005.

ACTIVITIES FOR WHICH THE FIRM IS RESPONSIBLE:

As the DBOM Program Manager and Prime Contractor. Washington Group is responsible for fast-track engineering and design; procurement; construction management; and startup and commissioning. As the Program Manager and prime contractor, Washington Group is performing engineering design for bridges, stations, the vehicle maintenance facility, utilities, and track. In addition to managing subcontractors performing certain civil, electrical and tunneling work, Washington Group is self-performing the civil and architectural work for the light rail stations, as well as some of the rail systems work. PB provided engineering services for the owner.

PROJECT COST:

$1.8 billion

COMPLETION DATE:

2005

REFERENCE:

Charles Dickerson
Director HBLRTS
New Jersey Transit
One Penn Plaza
Newark, NJ 07105-2246
(973) 491-8480

REPLACEMENT OF THE COOPER RIVER BRIDGES
Charleston, South Carolina

Skanska USA Civil and Flatiron are joint venture partners on the Replacement of the Cooper River Bridges. Execution for the joint venture is being carried out by operating companies Tidewater Skanska and Flatiron Structures. PB is the designer for the joint venture. The contract is for a design-build project to replace two old bridges on US 17 in Charleston County, South Carolina. The bridge will provide for eight lanes of traffic plus a pedestrian/bike lane. It will rise 186 feet above the water and have the longest cable-stayed main span in North America. There will be a major interchange at each end of the bridge, resulting in a total bridge length of over 2 miles. The main span towers are founded on 10 foot-diameter drilled shafts surrounded by rock islands. The towers will stand 570 feet above the water. Some of the required right-of-way is being procured by the design-build contractor. The contractor is also managing relocation of existing utilities. Protection of the fragile low country environment is being given a high priority. Design and construction is being fast tracked, with the bridge opening for traffic in 44 months. Extensive use is being made of local contractors and suppliers in the Charleston area.

ACTIVITIES FOR WHICH THE FIRMS ARE RESPONSIBLE:
Skanska USA and Flatiron are the joint venture design-builders; PB is the designer for the project.

PROJECT COST:
$531 million

COMPLETION DATE:
2005

REFERENCE:
South Carolina Department of Transportation
Bobby Clair, Project Director
212 Huger St.
Charleston, SC 29403
(843) 534-5004

WOODROW WILSON BRIDGE FOUNDATIONS

Oxon Hill, Maryland

Tidewater Skanska, a subsidiary of Skanska USA Civil, is leading a joint venture to construct the foundations of the new Woodrow Wilson Bridges. The award of the $125 million Bridge Foundation contract on May 17, 2001 for the new Woodrow Wilson Bridge was the first major contract of the $2.2 billion, eight-year project. The project will replace the existing single 6 lane bridge with two 6 lane bridges to ease the congestion of the I95/I495 main artery that crosses the Potomac River. This fast-track contract with a completion date of July 2003 consisted of the construction of 17 bridge piers, 11 of which are in the Potomac River. The construction involved 35 cofferdam cells and 48-in., 66-in., and 72-in. steel pipe piles ranging from 160 to 210 feet long.

The construction of the Bascule Piers was particularly demanding based on the requirement of homogeneous concrete placements in excess of 6,000 cy with tight temperature control to minimize thermal cracking.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Tidewater Skanska was the general contractor for foundation construction.

PROJECT COST:
$125 million

COMPLETION DATE:
April 2003, three months early

REFERENCE:
Maryland State Highway Administration
Mr. Paul Gudelski, District Engineer
6009 Oxon Hill Road
Suite 404
Oxon Hill, Maryland 20745
(301) 749-8801 ext. 229

PINNERS POINT CONNECTOR
Portsmouth, Virginia

The Pinners Point Connector will provide a new four-lane road and interchange from the Western Freeway (VA-164) in Portsmouth, VA to the Portsmouth Marine Terminal, Martin Luther King Expressway (VA-58) and the Midtown Tunnel. The project will have six bridges traversing through residential and industrial areas covering both water and land. The bridges will consist of concrete piles, drilled shaft foundations, reinforcing steel, structural steel beams, concrete beams, concrete deck, parapets and dredging an access channel for construction of the water bridge.

Also included in the project is a new Midtown Tunnel Building Complex and roadwork consisting of excavation, clearing, grading, paving, utilities, wick drains, fence/guardrails, sound walls, electrical, signs and traffic management system. Construction is scheduled for 1,000 days.

ACTIVITIES FOR WHICH THE FIRM IS RESPONSIBLE:
Tidewater Skanska is the General Contractor for this project.

PROJECT COST:
$136 million

COMPLETION DATE:
2005

REFERENCE:
Virginia Department of Transportation
Mr. P.D. Gribok, Resident Engineer
Mr. Michael Johnson, Engineering Manager
1992 South Military Highway
Chesapeake, VA 23320
(757) 494-2451

ORLANDO-ORANGE COUNTY EXPRESSWAY TOLL O&M

Orlando, Florida

Florida Toll Services—a Washington Group-led joint venture—under a $123.7 million contract, operates 100-miles of limited-access toll roads serving customers in the Orlando-Orange County area. The road system serves featured attractions such as Disney World and the Florida Citrus Bowl. It includes the East-West Expressway, Central Florida Greene-Way, the Bee Line Expressway, and the Western Expressway. Washington Group established the performance benchmarks for maximizing revenues, violation enforcement capture, and increasing customer satisfaction levels, as well as designed and maintained the measurement system to collect relevant data. As a result, as the volume of traffic has increased by 92% since the beginning of the contract in 1995, we have saved the client $2.8 million over the life of the contract, saved 190,000 man-hours, and customer satisfaction has increased by 61%.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Operations and maintenance.

PROJECT COSTS:
$123.7 million

COMPLETE DATE:
2004

REFERENCE:
Michael Snyder, PE, Exec. Dir.
Orlando-Orange County Expressway Authority (OOCEA)
(407) 316-3800

Alameda Corridor Transportation Authority

Goldman Sachs & Co. was hired in 1992 by the Alameda Corridor Transportation Authority (ACTA) to help develop a finance plan for a $2.2 billion rail corridor to link the Ports of Los Angeles and Long Beach to the central rail yards in downtown Los Angeles.

Goldman Sachs was hired based on our experience in the Port/Railroad community and our experience in helping develop plans of finance for major infrastructure projects among other items, we specifically aided the transaction in the following ways:

1. Identification of Funding Sources – Goldman Sachs worked with the Ports, the LACMTA, and the USDOT to identify potential funding sources for the project. In addition, our modeling work, combined with several studies from outside consultants also allowed us to create a set of proposed use fees for each type of cargo traveling through the corridor to be paid by the railroads.
2. Developed an extensive cash flow model which served as the central decision-making tool for the financing team
3. Development of Feasible Financing Plan – Key funding sources include equity contributions from the two Ports, use fees paid by the railroads and an innovative federal loan.
4. Negotiation of Use and Operating Agreement with Railroads
5. Assisted in negotiating a federal loan which is being used as the model for future TIFIA loan financings.
6. Design/Build Contract – Helped ACTA determine a project plan that will finish project 22 months ahead of schedule.
7. Tax Analysis – Together with tax counsel, Goldman Sachs helped develop a tax strategy that allowed ACTA to use a special Private Letter Ruling from the Internal Revenue Service to sell a substantial portion of the bonds tax-exempt.
8. Financing Structure – Achieved investment grade ratings on both the senior and subordinate lien bonds
9. Developed an effective marketing plan, resulting in a very successful financing in which the tax-exempt bonds were 4 times oversubscribed.

On the pricing date, the tax-exempt bonds were 4 times oversubscribed.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Senior Manager and Co-Senior Manager

PROJECT COSTS:
$2.2 billion

REFERENCE:
Alameda Corridor
Transportation Authority
Dean Martin, Chief Financial Officer
One Civic Plaza, Suite 650
Carson, California 90745
(310) 233-7480
(212) 878-7278

CITY OF RENO, NEVADA – RETRACT PROJECT

In October 1997, Goldman Sachs was appointed senior manager for the City of Reno on its ReTRAC project. The City has been attempting for the past 45 years to relocate the transcontinental mainline that was owned by the Southern Pacific (and now owned by Union Pacific) that runs directly through the heart of the City and within one block of 1,500 hotel rooms. Goldman Sachs was appointed to help craft a finance plan for the $250 million public-private partnership to drop the rail line into a 35-foot deep trench through a 9-intersection corridor. Three blocks in the central business district will be capped and a parkway/esplanade will appear in what has been a railroad right-of-way for over 135 years. An AMTRAK passenger rail station will be built in the new corridor as part of the overall transit plan for Reno.

The now-final funding plan includes:

a. 0.125% sales tax throughout Washoe County;

b. 1% room tax on downtown hotel properties;

c. Benefit Assessment District on all downtown properties;

d. $60 million settlement with the Union Pacific Railroad, which includes a lease on a number of property parcels transferred from Union Pacific to the City of Reno;

e. TEA-21 pass-through funding from Nevada DOT;

f. Tax-exempt Municipal Revenue Bonds; and

g. A USDOT loan under the TIFIA program.

Three different financing packages will be used to complete the project's funding plan. The first is a senior/subordinate financing that includes a senior-lien tax-exempt revenue bond secured by sales and hotel taxes and a TIFIA loan from the USDOT secured by a subordinate lien pledge on the same sales and hotel tax base. The second financing is a TIFIA loan secured by the downtown assessments. The third financing, which is not expected to be offered until 2004, is another senior/subordinated bond/TIFIA loan package paid from the lease income on railroad property transfers. Cash and pay-as-you-go financing make up the balance of the funding.

Goldman Sachs has modeled cash flows, planned funding steps, and supported the City staff in communicating funding plan elements to citizens' groups and policy makers, including members of Congress, members of the Nevada legislature and the staff of the USDOT.

Two separate legislative packages were passed in two different biennium to allow the project to move forward. Goldman Sachs was an integral member of the negotiating team working to gain a $60 million contribution package from the Union Pacific Railroad. In July of 2000, Goldman Sachs took the ReTRAC team to the U. S. Secretary of Transportation and applied for TIFIA assistance. In December of 2000, ReTRAC was awarded a $73.5 million TIFIA loan package as part of the project's funding. The final environmental Record of Decision (ROD) was issued on February 26, 2001 and the TIFIA loan package was successfully completed for the first funding package in June of 2002. This project is the first senior/subordinated use of the TIFIA program, an innovative funding initiative created by the USDOT to be used in senior/subordinated leveraging of private investment dollars for complicated transportation projects of national significance.

The project is being built under a design-build contract with Granite Constructors, and was awarded in June of 2002. The notice to proceed was given September 15, 2002 and the project is expected to take almost four years to complete.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Senior Manager

PROJECT COSTS:
$250 million

REFERENCE:
City of Reno
Andrew Lireen, Finance Director
490 South Center Street, Room 108
Reno, Nevada 89501
(775) 334-2410

Metropolitan Transportation Authority

Goldman Sachs was named financial advisor to the New York Metropolitan Transportation Authority (MTA) in August 2000. Under MTA's historic debt restructuring program, MTA [and its Triborough Bridge and Tunnel Authority (TBTA) affiliate] has issued $15 billion of debt as of May 2003. In addition, MTA/TBTA expects to issue over $2 billion of new money bonds under the program in 2003 and 2004. The 2002 issues are comprised of 18 inter- related and coordinated, yet separate series of bonds, including insured and uninsured fixed rate bonds, senior and subordinate bonds, taxable and tax-exempt bonds, variable rate demand notes, auction rate securities and commercial paper. MTA also entered into various interest rate swaps (including BMA and LIBOR-based swaps) to pre- hedge portions of its issuance and hedge a portion of its longer-term variable rate exposure. MTA also utilized special federal legislation passed in the wake of September 11 to advance refund several billion of bonds otherwise not advance refundable.

Goldman Sachs is involved in the development of new credits, drafting of resolutions, structuring of debt and the assurance of a successful marketing program. The restructuring simplified the MTA's credit structure by consolidating sixteen old credits into four new primary credits, modernizing old resolutions, releasing unnecessary reserves, increasing bonding capacity and, most importantly, providing approximately $4.5 billion of funding capacity for the MTA's $17.2 billion 2000-2004 Capital Program without increasing maximum annual debt service.

ACTIVITIES FOR WHICH THE FIRM WAS RESPONSIBLE:
Financial Advisor

REFERENCE:
Stephen Kessler, Chief Financial Officer
347 Madison Avenue
New York, NY, 10017
(212) 878-7278

1.c Point of Contact

Provide the names, addresses and phone numbers of persons within the firm or consortium who may be contacted for further information.

The following person may be contacted for further information regarding this conceptual proposal:

- **Francis X. (Buddy) Watson, P. E.**
  Tidewater Skanska, Inc.
  809 S. Military Highway
  Virginia Beach, VA 23464
  (757) 420-4140

Mr. Watson will serve as the SWB Project Director and member of the joint venture executive board. Please contact Mr. Watson regarding any questions or requests for additional information regarding this proposal.

1.d References

Include the address, telephone number, and the name of a specific contact person for an entity for which the firm/consortia or primary member of the consortia have completed a similar project.

The SWB Team members are proud of the infrastructure that they have designed and constructed. Please contact any of the references shown the project sheets included in Tab 1.B, Experience, for further information regarding the outstanding capabilities of the SWB Team members.

1.e Financial Statements

Provide a financial statement of the firm/consortia and each major partner. Submit the most recent Securities and Exchange Commission 10-K and 10-Q reports, if such reports have been filed.

- Appendix E contains the 2003 Annual Report of Skanska AB
- Appendix F contains the audited financial statement of Skanska USA Civil, Inc.
- Appendix G contains the audited financial statement of Tidewater Skanska, Inc.
- Appendix H contains the Form 10-K Annual Report of Washington Group International, Inc.
- Appendix I contains the Annual Report 2003 of Royal Bam Group nv.

Include any planned participation of small, woman and minority owned businesses during project development and implementation.

The SWB Team is committed, as a matter of policy, to the spirit and intent of socio-economic programs that are intended to ensure adequate opportunities for small, women, and minority owned businesses. SWB will provide written notification to all known small, women and minority-owned (S/W/M) businesses that specialize in the areas that will be subcontracted and will conduct workshops for these firms to broaden their level of participation. Drawings and specifications will be made available to all firms that express an interest in bidding opportunities. SWB will negotiate in good faith with all potential subcontractors.

All SWB team members have a history of meeting S/W/M business goals. SWB will advertise in a variety of media to ensure that S/W/M businesses are notified of business opportunities and plans will be reviewed to ensure that opportunities exist for participation by a variety of suppliers and subcontractors. SWB has already identified potential contracting opportunities for this project: demolition; excavation and grading; steel fabrication and installation; electrical; fencing and guardrail; traffic control; trucking services; asphalt concrete paving; survey services; and painting. SWB plans to implement the following actions to encourage S/W/M business participation.

- Organize pre-proposal conferences to make S/W/M businesses aware of contract opportunities.
- Develop a S/W/M mailing list to advise S/W/M businesses of bid dates and the location of the procurement documents.
- Identify construction packages where subcontracting opportunities exist.
- Contact firms with whom SWB has successfully worked together in the past to ensure that they are included on the bidding lists.
- Contact Commonwealth certified firms using published S/W/M listings.
- Identify contract/procurement packages that can be used to target S/W/M firms during the design process. In some cases, these packages can be reduced to a monetary level that will encourage S/W/M participation.
- Advertise in local newspapers and trade magazines to encourage S/W/M awareness and participation.
- Provide flexible payment provisions in S/W/M business contracts. Early payment clauses may be included in certain contracts to alleviate cash flow problems.

SWB's S/W/M business outreach program will be managed by a small and disadvantaged business specialist who has developed identical programs in the past. SWB members, in the normal course of business, have successfully addressed these requirements and have established relationships with S/W/M businesses.

Provide a description of the transportation facility or facilities, including the conceptual design and all proposed interconnections with other transportation facilities. Identify communities that may be affected and the assumptions used in developing the project.

Project Description

The Third Hampton Roads Crossing will connect the Hampton and Newport News areas with Suffolk, Portsmouth, Chesapeake, Norfolk, and Virginia Beach. The project will reduce current congestion and meet projected traffic demand, foster economic development, maintain the region's quality of life, and include the first Hampton Roads High Occupancy Vehicle (HOV)/Busway crossing which provides space for the future addition of rail transit service. The Third Hampton Roads Crossing will also more than double the capacity to evacuate low lying areas in the event of a hurricane.

Various alternatives to achieve this purpose have been evaluated by a Major Investment Study (MIS). A Locally Preferred Alternative (LPA) has been selected as part of the MIS process and was approved by the Commonwealth Transportation Board (CTB) in September 1997. The Environmental Impact Statement (EIS) was approved in March 2001, and the Record of Decision was issued in June 2001. The EIS supported the LPA that is defined by the five phases outlined below. SWB is proposing to develop, design, construct, and finance all five phases.

- **Phase I** – Create a new intermodal connector (I-564) from Terminal Boulevard past Hampton Boulevard in Norfolk to a new interchange with I-664 that is located south of Monitor-Merrimac Memorial Bridge Tunnel. This section would consist of four general-purpose and two multi-modal lanes constructed as a bridge-tunnel. This section will ultimately connect to a fourth cargo port at Craney Island (Phase III) and provide access to the Norfolk International Terminals and I-564. Direct access to the facility would also be provided from the Naval Operating Base.

- **Phase II** - Widen the I-664, Monitor Merrimac Memorial Bridge Tunnel from Newport News to the I-664/ I-564 Interchange with the addition of four general purpose and two multi-modal lanes. This section will be a bridge tunnel that is constructed west of the existing facility.

- **Phase III** - Construct a new four-lane road intersecting the extended I-564 and traversing Craney Island to an interchange with the Western Freeway (VA-164) in Portsmouth. This roadway will provide direct access to Craney Island, the Maersk Sealand terminal in Portsmouth, and also the Portsmouth Marine Terminal. Access to the Midtown Tunnel and the Downtown Tunnel will be provided when the Pinners Point and Martin Luther King Expressway extension projects are completed.

- **Phase IV** - Widen I-664 from its current interchange with I-64 in Hampton to the Newport News end of the Monitor Merrimac Memorial Bridge Tunnel. This section will consist of eight general-purpose and two multi-modal lanes, adding two lanes in each direction.

- **Phase V** - Widen I-664 from its intersection with I-564 to the I-64/I-264 Interchange in Portsmouth. The improvement would add one lane in each direction, resulting in six general-purpose lanes. This

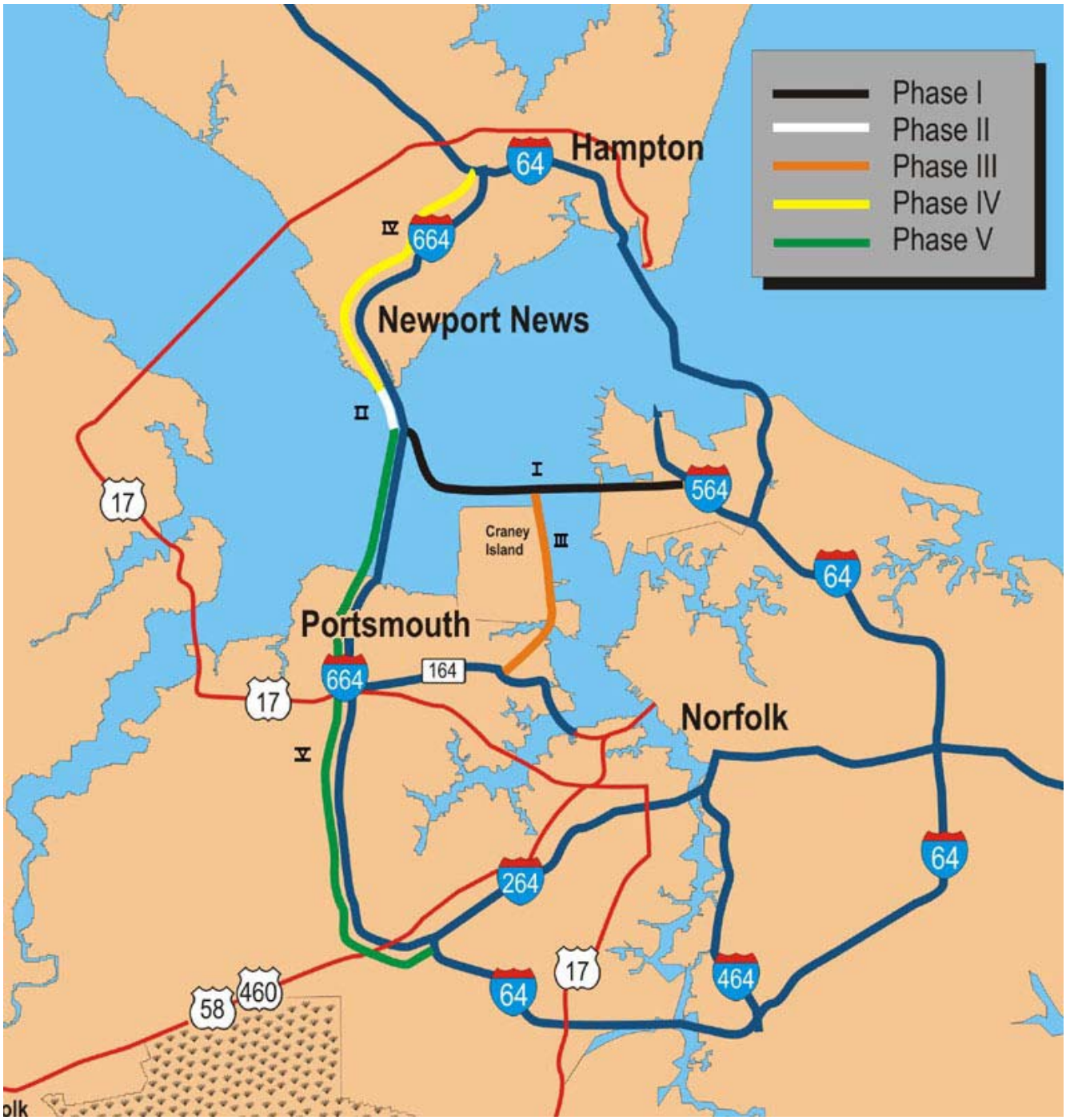
phase will complete an improved connection from I-64 to the growing US 58/US 460 corridor and includes about 3 miles of roadway on a trestle over Hampton Roads.

Figure 2.1, EIS Alignment, shown on the following page, describes the general alignment that is included in the Final Environmental Impact Statement (FEIS). This alignment satisfies all of the needs that are defined by the MIS.

The EIS has been the subject of intense review to comply with all federal and Commonwealth requirements. Commonwealth, federal, and local government agency efforts are chronologically listed below:

- July 1997 – Hampton Roads Metropolitan Planning Organization (MPO) selects the LPA.
- September 1997 – Commonwealth Transportation Board endorses the LPA.
- October 1997 – the Final Major Investment Study is completed.
- October 1999 – the Draft Environmental Impact Statement (DEIS) is completed.
- Early 2000 – Public Hearings are held.
- July 2000 – the Commonwealth Transportation Board approves the DEIS.
- March 2001 – the Final Environmental Impact Statement (FEIS) is completed.
- June 2001 - Record of Decision is issued.
- 2001 and early 2002 – Proposals received by VDOT for design and construction under provisions of PPTA
- Third Hampton Roads Crossing Commission, established by House Joint Resolution 125/2000, has reviewed the project on several occasions
- August 2002 – VDOT returns proposals submitted under PPTA
- November 2002 – Voter Referendum rejects extra taxes for highway construction
- August 2003 – Hampton Roads Metropolitan Planning Organization (MPO) includes Phase I as a toll road in the 2026 Regional Transportation Plan, which was subsequently approved by VDOT and FHWA.

Figure 2.1 Environmental Impact Statement (EIS Alignment)



Identify and fully describe any work to be performed by VDOT.

SWB expects that the following work will be performed by VDOT:

Development

As a public-private transportation venture participant, VDOT will act as the lead agency, or project sponsor. This effort will extend to participating in the creation of an IRS 63-20 corporation. VDOT will also be responsible for the management and administration of the Comprehensive Agreement.

VDOT's participation will be required for coordination with the Federal Highway Administration (FHWA) because the crossing involves interstate highways. The involvement will likely include new connection agreements as the project includes I-564, I-664, I-64, and the I-64/I-264 Interchange. Coordination with other federal agencies will also be required since permits will be obtained from the U.S. Army Corps of Engineers, the U.S. Coast Guard, and other federal agencies. Additionally, a number of other Commonwealth agencies will be involved.

Design

VDOT will also be involved in various reviews and approvals during engineering and design. This includes conducting design reviews to ensure adherence to the adopted design criteria and standards. VDOT will also approve the crossings geometric design as part of this effort.

It is anticipated that VDOT will provide dedicated engineers during the design phase in the Project Office. The VDOT staff will be responsible for providing technical guidance and design reviews for the various construction packages. VDOT's presence will be critical to maintaining the design schedule since design-build projects are executed on a fast-track basis. The reviewers need to be familiar with each construction package's development through continuous "over-the-shoulder" reviews, and develop a comfort level with the incremental development and release of plans. This coordination is needed on a day-to-day basis rather than the periodic reviews typical of the design-bid-build approach.

Construction and Acceptance

Finally, VDOT will be responsible for accepting the completed transportation facility. Specific responsibilities will be defined prior to the execution of the Comprehensive Agreement. The Quality Assurance and Quality Control Inspection Program will define responsibilities for quality control and quality assurance including acceptance testing and final acceptance. SWB will coordinate its efforts with VDOT to define these responsibilities. It is assumed that acceptance testing and final acceptance will be performed by VDOT.

2.c Permits

Include a list of all federal, state and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

Federal and Commonwealth laws and regulations require that various environmental permits or approvals be acquired prior to the start of construction activities:

- Compliance with Executive Order 11990, Protection of Wetlands, and Section 404 Permits, Clean Water Act, from the U.S. Army Corps of Engineers
- Section 10 Permit, Rivers and Harbors Act, from the U.S. Army Corps of Engineers
- Virginia Water Protection Permit from the Commonwealth of Virginia, Department of Environmental Quality
- Subaqueous Bed Permit, Virginia Water Law, from the Virginia Marine Resources Commission
- U.S. Coast Guard Permit
- Compliance with the Endangered Species Act (ESA)
- Compliance with Section 106 of the Natural Historic Preservation Act
- Compliance with Section 4(f) of the 1966 Department of Transportation Act
- Compliance with Executive Order 12898 on Environmental Justice
- Storm water management, erosion and sediment control permits from the Virginia Department of Conservation and Recreation

Permits from local agencies will be identified during preliminary engineering. A local permit matrix will be prepared as public agencies are contacted to determine their involvement and permitting requirements. SWB will assign a permit specialist to the project during final engineering and design to coordinate with PB/Jacobs and to manage the permit acquisition process. The permit specialists will be the contact for all government agencies, ensuring that the proper permits are obtained prior to the start of construction and that all permit requirements are met.

A permit acquisition schedule will be prepared during preliminary engineering once the required permits have been identified and their requirements made known. Construction planning that will occur during this timeframe will include the definition of construction packages and their scheduling requirements. This scheduling effort will also consider permit requirements. Some permits are time sensitive and have expiration dates. Their acquisition will be scheduled appropriately to avoid schedule delays.

2.d Environmental Impacts

Without completing an Environmental Impact Statement, identify any anticipated adverse social, economic and environmental impacts of the project. Specify the strategies or actions to mitigate known impacts. Identify the projected positive social, economic and environmental impacts of the project.

A Final Environmental Impact Statement (FEIS) was approved by the Federal Highway Administration on March 1, 2001 and a Record of Decision (ROD) for the project was issued in June 2001. These documents have been used to prepare SWB's conceptual proposal.

The Hampton Roads area is a growing metropolitan region with a diverse population involved in ship building, shipping, heavy industrial, military, tourism and a broad range of commercial enterprises. The continuing sustenance, quality of life and continued growth of the region's financial base will be severely hindered by limited access across major navigable waterways that dominate the area.

Hampton Roads is crossed by the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel. Each of these facilities provides two mixed flow lanes in each direction and serves different activity centers. These facilities provide limited alternate use selection during the ever-increasing peak congestion periods and also provide extremely limited public transit. The MIS and the EIS process provided startling data, portraying a region in perpetual gridlock with stifled economic and population growth before 2015 without expanding the Hampton Roads crossings.

This lack of traffic handling capacity has been recognized and extensively documented. Various studies have concluded that a Third Hampton Roads Crossing that provides added capacity for vehicles and bus/rail transit access from Newport News across the Craney Island portion of Portsmouth to Norfolk is the best solution. This crossing concept with the widening of I-664 and I-564, and a direct connection to the Western Freeway, VA-164, has been adopted as the Locally Preferred Alternative (LPA) by the Hampton Roads Metropolitan Planning Organization (MPO). The LPA has been approved by the Commonwealth Transportation Board, and was endorsed by the Governor of Virginia in July 2000. The EIS alignment has been selected as the LPA.

The EIS addresses environmental impacts and suggests appropriate mitigation measures and strategies. To summarize, mitigation can be accomplished by refining the alignment during engineering and design, including provision for sound attenuation features where appropriate, and phasing construction to minimize wildlife impacts. Vehicle emissions will actually decrease after the opening of the Third Hampton Roads Crossing project as compared with the no-build option. SWB is committed to environmental quality, as evidenced by Skanska's ISO14001 certification. SWB will incorporate appropriate features in the facility's design that address the requirements that are defined by the EIS and the environmental permits. SWB will also phase construction to avoid disturbing wildlife during critical seasons.

The impact to residences and businesses is relatively minor. The project will involve the relocation of 38 residences and 11 businesses as the alignment is primarily over water or in existing right-of-way. This alignment requires very minor noise mitigation measures, which will be incorporated during design and construction.

2.d Environmental Impacts

The project will significantly improve the quality of life for the region's inhabitants with no adverse environmental impacts. Quality of life also means that there will be an equitable distribution of employment opportunities and contracts among the region's diverse cultures. SWB will use locally hired employees and regional subcontractors to the maximum extent possible and is committed to an equitable distribution of contracting opportunities.

The Third Hampton Roads Crossing provides the region with the capability to grow and prosper economically in the domestic and worldwide markets. The direct connection of Newport News, Norfolk, and Portsmouth will substantially improve shipping links between the three major port complexes. The connector link, between the extended I-564 and VA-164, Western Freeway, will provide the capability to develop a significant fourth port at Craney Island with truck access to the other three Hampton Roads ports and rail facilities.

The tourism industry will continue to thrive and be a major economic factor in the region with the completion of a third crossing. Less congestion, alternate route selection and bus/rail transit capacity will attract more visitors and tourists who will be better able to enjoy the regions' many attractions.

The EIS considers these long-term social and economic enhancements. On a short-term basis the negative impacts that are normally associated with construction will be comparatively minor because almost the entire footprint of the project is in previously purchased right-of-way and unencumbered maritime areas. The short-term negative impacts will be offset by the creation of employment opportunities, the magnitude of business growth/development that will occur, and the positive environmental impacts such as cleaner air.

This project is definitely in the best interests of the region's population. Citizens and businesses await the completion of this critically needed transportation facility. An effective public information program, including extensive outreach efforts, will be provided by SWB to continue fostering public support. The public information program will respond to environmentally related public concerns. SWB will make every effort to inform the public of protective measures that are being taken to protect the Hampton Roads area.

List the critical factors for the project's success.

The success of the Hampton Roads Third Crossing is contingent upon several important factors including the composition of the Project Team, a viable financing plan, public support, and institutional support. These factors are discussed as follows.

- **The SWB Team** - SWB was formed specifically to undertake this project. The member companies and designated designers have more contemporary waterfront and highway design and construction experience in the Hampton Roads area than any other imaginable team. The SWB members know the area well, and are acutely aware of the social and economic issues and benefits that are associated with a third crossing. SWB has started the process of assembling an experienced and dedicated staff of long-term employees to undertake the development of the Third Hampton Roads Crossing. SWB will execute the project at the lowest possible cost and with minimal social, environmental, and economic impact. The skills of the SWB Team, immense assets and capabilities of the parent firms and the commitment of these firms to dedicate their best resources to the SWB Team will ensure success.

The Third Hampton Roads Crossing success requires that high quality be built in from the start. The SWB Team has a proud history of executing well-controlled and complex projects that have been constructed to exacting standards, while meeting cost and schedule goals. Minimizing time requirements and constructing a high-quality project safely will encourage public support, reduce inconvenience to the traveling public, while also reducing construction costs.

Local and regional workers and subcontractors will be employed to the maximum extent possible. They will be fully integrated into the SWB Team and contribute to the project's success.

The SWB Team will also establish and maintain mutually beneficial relations with VDOT, a proposed IRS 63-20 organization or a public agency, the regional governing bodies, regional organizations, and a myriad of civic, social, economic, professional, business and special interest groups. SWB is committed to partnering with all stakeholders for mutual success.

- **Project Financing** - VDOT has estimated the Third Hampton Roads Crossing would cost $4.4 billion if it were designed and constructed between 2001 and 2014. The SWB estimated cost of the Third Hampton Roads Crossing and the planned method of financing are discussed in Tab 3. Under SWB's plan, the cost of the crossing can be reduced substantially and the duration shortened. The traveling public will be able to use the completed facility earlier than planned, and the taxpayer will not have to bear the burden of a much more expensive facility.

- **Project Financing** - Testimony provided during the public comment and community outreach programs of the MIS and EIS and input from government officials, private sector groups, and individuals indicate overwhelming support for the project. Many people recognize that it is needed now, and it is widely recognized that it is needed several years before VDOT's estimated completion date if the region is to experience a reasonable quality of life.

The public is justified in its concern regarding how to pay for this urgently needed, but fiscally constrained project. A study published by the Hampton Roads Partnership in 2000 indicates that a majority of residents are willing to finance transportation improvements through the imposition of tolls,

a dedicated sales tax increment, a dedicated gas tax increment, or a combination of these financing alternatives. The November 2002 referendum provided mixed results on similar questions but there remains strong support for a viable Third Hampton Roads Crossing. Gaining additional public support for financing the project during the next six years is critical, otherwise the project's cost could nearly double without any tangible benefit to the public. TAB 3 discusses SWB's proposed financial plan.

Forming Coalitions - VDOT and the SWB Team must form stakeholder coalitions during the development process to develop mutually beneficial solutions and foster communication. The major participants will include the FHWA, the U.S. Army Corps of Engineers, the U.S. Navy, the Hampton Roads Metropolitan Planning Organization, local jurisdictions, and other local agencies and port authorities, as well as business interests and the public at large. Defining mutual interests and developing plans to address those interests will be of paramount importance. SWB has dealt effectively with all of the involved parties in the past. Relationships already exist that will allow SWB to quickly move forward.

2.f Schedule

Identify the proposed schedule for operator's work on the project, including the estimated time for completion.

VDOT's fiscally constrained schedule in 2001 reflected a 14-year construction period, resulting in a 2014 completion date. This schedule is dependent upon the availability of direct funding from already strained Commonwealth and federal sources. It is clear that limited funding is available at this time and the project's multi-phase development would depend on incremental funding over several decades, assuming that it was available.

SWB has developed financing and construction plans for the Third Hampton Roads Crossing that are presented in TAB 3. Recognizing that time is of the essence, this proposal is based upon executing a Comprehensive Agreement with VDOT and receiving a notice-to-proceed by 2007. The intervening months will be used to further define the project sufficiently to allow the preparation of a fixed price estimate. Given that a notice-to-proceed shortly after the Comprehensive Agreement is executed, final engineering and design could proceed shortly thereafter. This accelerated schedule will allow the facility to be completed in significantly less time than planned, resulting in several important benefits:

- Greatly reduced construction costs
- Improved quality of life
- Greatly reduced interest costs
- Added capacity years earlier
- Economic benefits are realized years earlier

Once final engineering and design begins three levels of schedules will be used to plan, monitor and control the design program: Level 1 (Master Schedule); Level 2 (Critical Path Method Schedule); and Level 3 (Control Level Schedules). This schedule system will be fully integrated and define the objectives of the plan of execution for each level of the organization.

The Master Schedule will define major milestones for each construction package. A project-level schedule will further define the major activities that are associated with each milestone that is shown on the Master Schedule. This Precedence Diagram Method Schedule will be used to define the interrelationship of planning, design, procurement, and construction activities, including activities performed by others and permitting activities. Control-level schedules will be developed for each construction package to define all activities to use as the basis of status and progress reporting.

Propose allocation of risk and liability for past agreement work and assurances for timely completion of the project.

Skanska/Washington/BAM (SWB), PB, and Jacobs will bear all design and construction liability in accordance with existing professional standards and statutory requirements. The project will meet or exceed all applicable laws and regulations.

The SWB Team has extensive experience in executing the type of project envisioned as the Third Hampton Roads Crossing and have undertaken numerous projects together. Based on the Team experience in design and construction in the Hampton Roads area with projects that bear many similarities to all phases of the Third Crossing Project, SWB is confident the project can be completed by 2013. SWB expects to provide a firm price during finalization of a Comprehensive Agreement by December 2006.

SWB recognizes that environmental considerations will limit timeframes for dredging operations and that weather factors are always more pronounced for maritime construction. SWB's collective experience in the Hampton Roads area demonstrates the Team's proven capability to control schedules and produce quality facilities in this environment. Based on a proven record, SWB is willing to accept liquidated damages as part of the finalization of the Comprehensive Agreement.

2.h Assumptions Related to Ownership, Liability and Operational Responsibility

Clearly state the assumptions related to ownership, legal liability, law enforcement and operation of the facility.

As currently envisioned VDOT will have ownership and police responsibility upon completion of construction except for certain specialty items. Law enforcement and legal liability will be the responsibility of appropriate governmental agencies.

SWB will be responsible for operations and maintenance of the new facilities.

2.i Project Partial Openings

Provide information relative to phased or partial openings of the proposed project prior to completion of the entire works.

Openings are scheduled to coincide with the completion of operable segments. Interfacing of operable segments is addressed in Tab 3.

INTRODUCTION

This section presents the schedule, estimates and financing plans for the alignment approved in the Record of Decision (ROD). There are numerous alternatives based on selected phasing, selected scope, toll levels and availability of funds in addition to toll revenue. Financially appealing alternatives to the ROD-approved alignment are available to explore through later phases of the PPTA process. The following assumptions were used to prepare Skanska/Washington/BAM's (SWB) proposal:

- Primary funding will be provided through tax-exempt toll revenue bonds. Secondary funding will be obtained by VDOT from other sources.
- Tolls will be placed on the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel in July 2008, 18 months after Notice to Proceed.
- The project will be accomplished on a develop-finance-design-build-operate and maintain basis rather than the traditional design-bid-build basis.
- A Comprehensive Agreement, as described in the Public Private Transportation Act of 1995, will be executed during December 2006, followed by a Notice to Proceed in January 2007.
- VDOT estimated right-of-way costs of $70 million are reasonable and include right-of-way owned by governmental agencies. VDOT will execute its right of eminent domain if necessary
- All costs for toll collection are included in the SWB proposal. The primary means of toll collection will be via electronic scanning such as EZ-Pass or Smart Tag.
- SWB will be responsible for operations and maintenance of the new facilities.
- Craney Island will be available as a dredge disposal site.
- Bond interest rates and other financial terms are based on the April 30, 2004 market conditions for 35-year term, tax-exempt toll revenue bonds.

The estimate and schedule for the SWB concept proposal compared to the current (2001) VDOT proposal is as follows:

	VDOT Plan (2001)	SWB Plan (2004)
Estimated Cost ($M)	$4,400M*	$3,671M
Completion Date	2014*	2013
*Note: Excludes Intermodal Connector from Hampton Boulevard to I-564 and is based on a project start in 2001. If costs were escalated to 2004, the SWB proposal would save greater than $1B		

Provide a preliminary estimate and estimating methodology of the cost of the work by phase and/or segment (e.g. planning, design, construction).

This section addresses the cost estimates for the financing, design and construction of the Third Hampton Roads Crossing. Estimated costs are also provided to finance, design and build the project by phases. The breakdown of total project cost, by percentage is:

Planning	1.5%	
Design	5.0%	
Construction	93.5%	(Including Construction Engineering & Inspection)

The alignment of the Third Hampton Roads Crossing is illustrated in Figure 3-1. This alignment and the five phases were approved in the June 2001 Record of Decision culmination of the Environmental Impact Study. This alignment has also been approved by the Commonwealth Transportation Board and the Metropolitan Planning Organization (MPO). In August 2003, the MPO added the four non-restricted access lanes of the intermodal connector from Hampton Boulevard in Norfolk to the intersection of I-564 to Phase I. This intermodal connector is included in the SWB proposal.

Based on a January 2007 Notice to Proceed, SWB can complete the entire project in 2013 at an estimated cost of $3,671M. The same scope and phasing, exclusive of the intermodal connector, was presented to the Third Hampton Roads Crossing Commission by VDOT on January 15, 2001 with an estimated cost of $4,400M and a projected completion date of 2014, assuming a project start in early 2001.

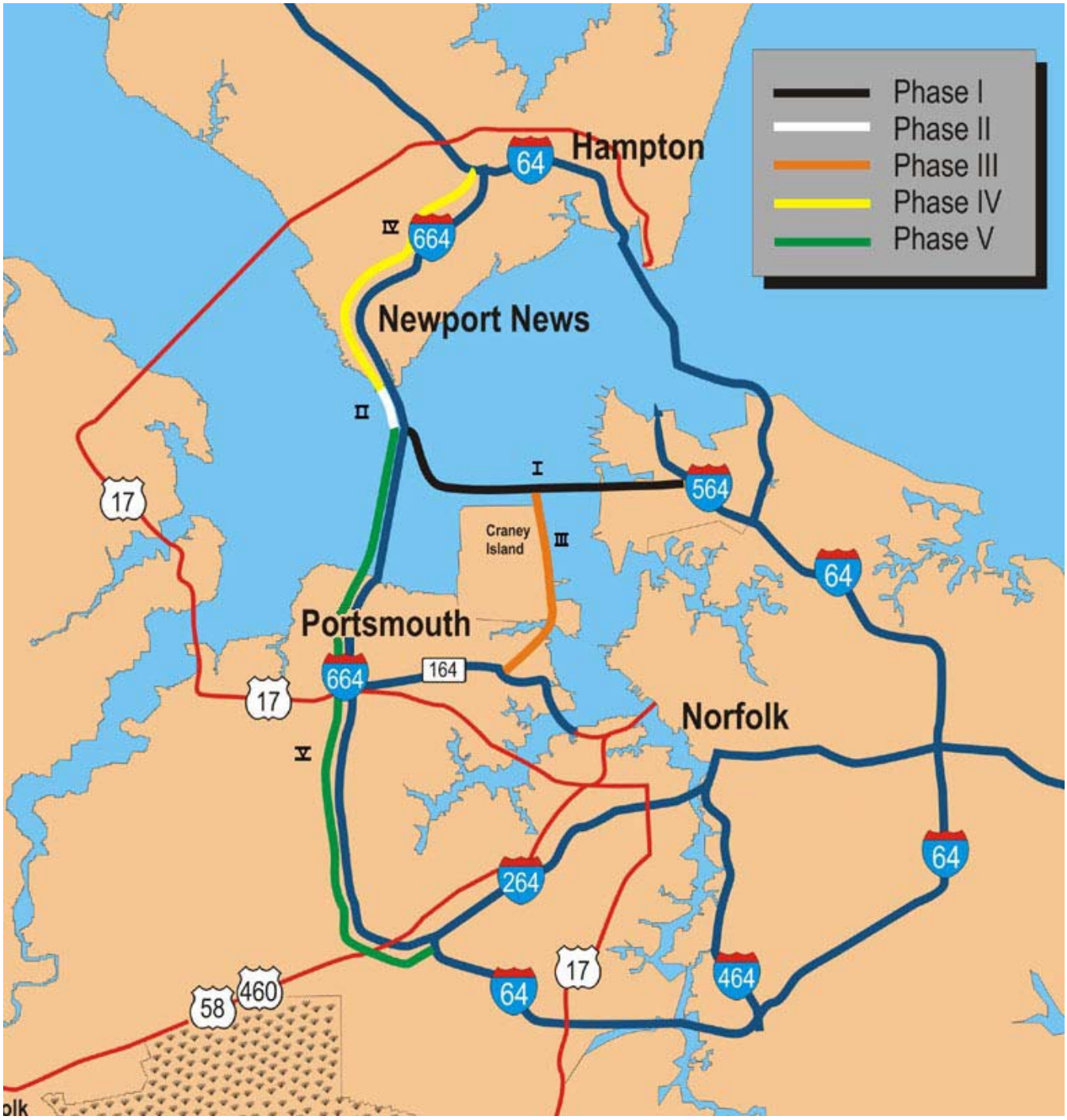
The project can be built in phases to provide operational segments as needed to meet the growing traffic demand. If VDOT elects to construct the project in phases, SWB recommends that Phase II be built concurrently with the redefined (August 2003) Phase I to minimize costs, to meet the growing traffic demands on the Monitor Merrimac Memorial Bridge Tunnel, and to avoid significant extra costs for temporary facilities that are needed to make Phase I feasible as a stand-alone facility. The costs by phases are illustrated in Table 3.1.

Table 3.1 Estimated Cost by Phase

PHASES	SWB Plan
Phases I and II	$2,499M
Phase III	$551M
Phase IV	$305M
Phase V	$316M
Total	**$3,671M**
Completion Date	**July 2013**

Phases I and II represent the backbone of the Third Hampton Roads Crossing and provide the basic functionality of the project. Phases III, IV, and V are independent of each other but depend on Phases I and II to achieve the required capacity. The start of these three phases could be scheduled as shown in Figure 3.2 to achieve completion of all five phases by 2013. Phases III, IV, and V could also be scheduled independently to meet ridership demands or the availability of funds.

Figure 3.1 Project Alignment



Submit a plan for the development, financing and operation of the project, showing: the anticipated schedule on which funds will be required; and proposed sources and uses for such funds.

Figure 3.2, Project Schedule, illustrates the timeframe for major activities associated with the development, design and construction of the Third Hampton Roads Crossing. A further breakdown of key elements germane to project financing is outlined below:

Period	Activity
7/04–11/04	▪ VDOT issues public notice that an unsolicited proposal has been received.
12/04–01/05	▪ Initial Review Committee review and recommendation
2/05	▪ Commonwealth Transportation Board decision.
2/05-3/05	▪ Resolve requirements for the detailed Technical Proposal phase and execute an initial agreement.
3/05-3/06	▪ SWB develops concept engineering and studies.
4/06	▪ Detailed Technical Proposal and preliminary engineering submitted for Advisory Panel review. ▪ Detailed Technical Proposal submitted to local governments for their 60 day review period. ▪ VDOT, with SWB assistance, submits analysis to FHWA for tolling existing interstate highways.
8/06	▪ Negotiations complete and approved. Initiate efforts for bond offering.
12/06	▪ Comprehensive Agreement executed.
1/07	▪ Notice-to-proceed issued.
2/07	▪ Funding in place.
6/07	▪ Complete toll facility design and begin construction. ▪ Design for islands complete and permits for Island construction issued.
1/08	▪ Island construction starts.
7/08	▪ Begin toll collection.
12/09	▪ Initiate second bond offering.
12/10	▪ Complete project design.
7/13	▪ Complete facility open to public.

While Phases I and II must start at the earliest possible date, the remaining phases can be scheduled with Phases I and II to maximize construction efficiency. Table 3.2, Schedule of Funds Required for Each Alternative, illustrates the funding required for each year for the complete scope of the project if all phases are to be completed by 2013. Table 3.2 also provides the funding required for each year if VDOT elects to authorize completion of only Phases I and II.

Figure 3.2 Project Schedule

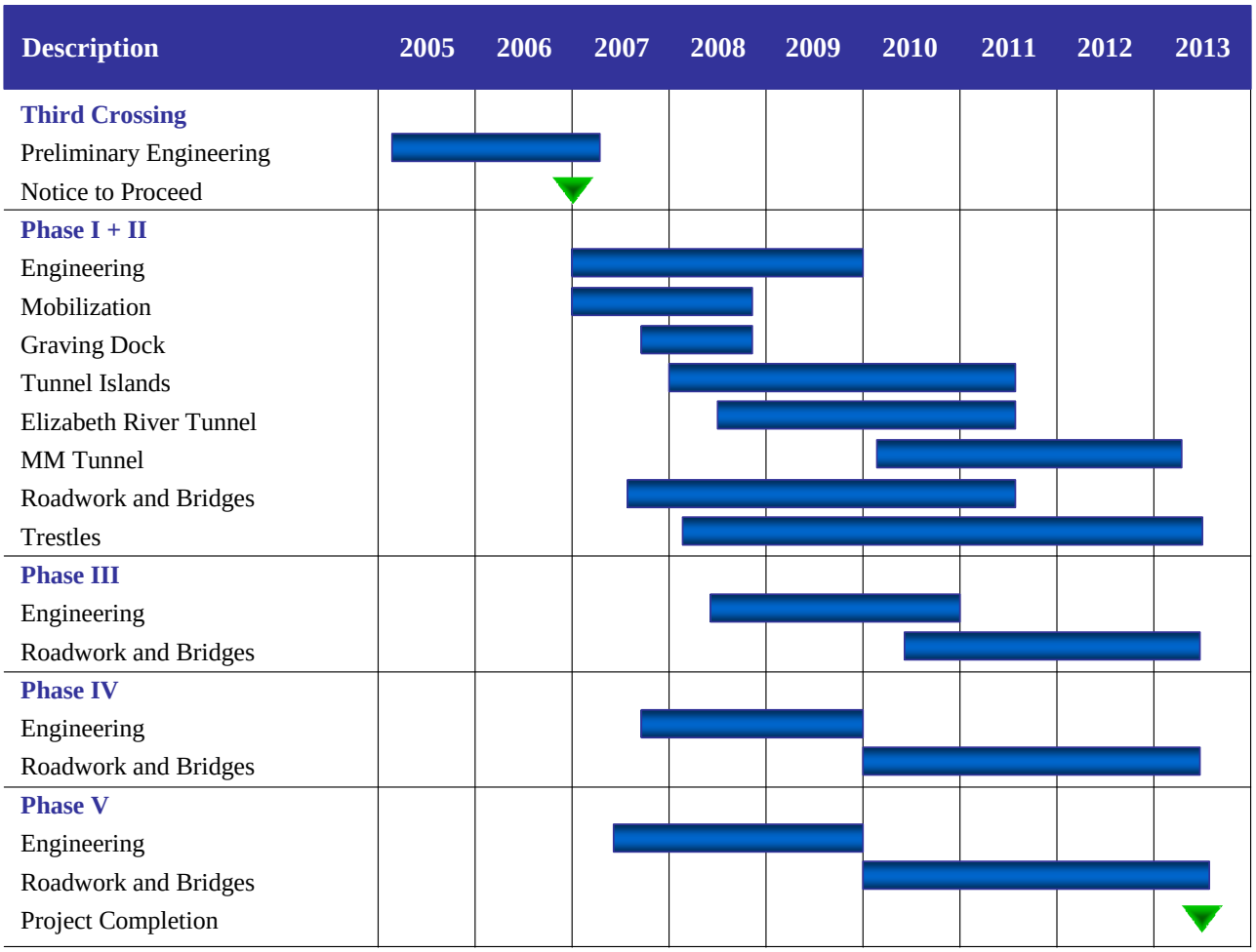


Table 3.2 Schedule of Funds Required for Each Alternative

YEAR	COMPLETE PROJECT $ in Millions	PHASES I AND II ONLY $ in Millions
2007	179	179
2008	465	457
2009	550	501
2010	733	546
2011	763	400
2012	645	300
2013	336	116
Total	**$3,671**	**$2,499**

The proposed funding source for this project is through a combination of toll collection and VDOT obtaining external funding. The financial model utilizes non-recourse toll revenue bonds issued by a non-profit organization (IRS 63-20 or public agency). Bond offerings will be in 2006 and 2010.

Toll Revenue will be provided from toll collection facilities at the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel starting in July 2008.

Sources and uses of funds for the SWB alternatives outlined above are included in TAB 3f.

Include a list and discussion of assumptions (user fees or toll rates, and usage of the facility) underlying all major elements of the plan.

The EIS provides traffic projections for the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel. These figures suggest that the aggregate traffic for these facilities would increase at 2.9 percent per year after the 1994 base year. VDOT's traffic volume measurements through 2003 confirm that the growth is in line with these projections. For the purposes of the financial analysis SWB has assumed:

1. A conservative traffic growth rate of approximately 2 percent per year after 2002.
2. Execution of the Comprehensive agreement during December 2006.
3. Instituting tolls on Hampton Roads Bridge-Tunnel and the Monitor Merrimac Memorial Bridge Tunnel in July 2008.
4. An average toll for each vehicle, regardless of the type of vehicle or hour of the day. A more diversified toll structure will be developed during preparation of the detailed technical proposal.
5. All costs associated with the toll collection function will be paid out of the toll revenues. Toll collection would be done primarily by electronic means such as EZ-Pass or Smart Tag.
6. All right-of-way can be obtained within the VDOT estimate of $70 million.
7. An escalation rate for construction costs of 3.5 percent per year.
8. VDOT will be able to obtain the required authority to place tolls on the Monitor Merrimac Memorial Bridge Tunnel and the Hampton Roads Bridge Tunnel.
9. A conservative financing package based on April 30, 2004 market conditions.
10. Imposing tolls reduces projected traffic by 3 percent per $0.50 toll increment.
11. VDOT will obtain funds from other sources in accordance with the timeframe of the selected alternative.
12. The average toll increases $0.50 every five years after completion in 2013 to compensate for inflation.
13. The above toll rates are averages between cars and trucks and the selected method of toll payment (cash or electronic).

Based on the assumptions above, SWB has determined that:

Case 1. Phases I and II can be financed without funds from other sources if the starting toll in 2008 is set at $2.00/trip and the toll is increased to $5.75/trip upon project completion in 2013.

Case 2. The complete project (Phases I through IV) will require $900 million in funds from other sources, even with a starting toll of $2.00/trip in 2008 and an increased toll of $8.50/trip in 2013.

The toll rate may be reduced or the debt retired earlier if:

- External funding is increased.
- Interest rate is lower.
- Actual traffic is greater than expected.
- Certain loan guarantees are obtained.

Some of these funding options could be explored further during the preparation of the detailed technical proposal. For illustration purposes, the following examples show two of a virtually infinite number of potential alternatives with external funds, the impact of varying the initial tolls (July 2008), and the amount of external funds:

Alternate A. If Phases I through V were built:

- Initial (2008) toll is $2.00/Trip
- Toll upon completion in 2013 is $3.00/Trip
- External funds required are $1,850M

Alternate B. If Phases I and II were built:

- Initial (2008) toll is $2.00/Trip
- Toll upon completion in 2013 is $3.00/Trip
- External funds required are $600M

Note: Funding generated by required debt/service ratio could be used as a fund source for remaining phases.

Identify the proposed risk factors and methods for dealing with these factors.

SWB is confident that the Third Hampton Roads Crossing can be built by 2013 based on the assumptions in this submittal. This conceptual proposal demonstrates that the project is financially feasible and satisfies a demonstrated need. SWB is prepared to begin negotiations with VDOT to arrive at a mutually acceptable price and schedule that will result in the SWB assuming risk commensurate with anticipated returns. Four major areas of risk have been identified as outlined below.

- **Availability of Funds** – The presentation of financial alternatives depends on the acceptability of tolls to a certain level and the availability of other funding to finance the remainder of the costs. The MPO and various public opinion polls indicate that tolls will be acceptable to a certain extent, but the Third Crossing will require a significant amount of funds from other sources even if the maximum public acceptability of tolls is $3.00 per crossing in 2013. VDOT's ability to obtain the required funds from other sources is essential to the success of the proposed project.

VDOT and the Hampton Roads Planning District Commission are currently contracting for a Toll Feasibility Study. The results of this study will be incorporated in the detailed Technical Proposal.

The proposal also assumes that The Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel will be tolled. VDOT needs to obtain the required approvals to institute toll collection on these existing Interstate Highways for the purpose of reducing congestion at these facilities by using an improved traffic management system and constructing the Third Crossing. The capability of VDOT to obtain the requisite authority in the time frames indicated is critical to the success of the undertaking.

- **Rising Construction Costs** - Starting the project as quickly as possible is integral to the success of the financial plan. Inflation will increase project costs by over $100 million per year. Time is of the essence. SWB is ready to move quickly. The SWB proposal includes escalation commensurate with the proposed schedule and assumes a Comprehensive Agreement is in place by December 2006.

- **Actual Traffic** - A major concern for any project using private financing is that the projected traffic will not materialize. For the Third Crossing the risk is minimized because traffic history is known and the tolling plan minimizes diversion alternatives. SWB has made a conservative traffic projection based upon long-term historic data for all the existing crossings and industry accepted traffic suppression rates. All Hampton Roads crossings are to be tolled. SWB is confident that the projected toll revenues will support the assumption of debt through sale of non-recourse toll revenue bonds.

- **Obtaining Permits** - The Third Hampton Roads Crossing Project requires numerous permits from various agencies, which can be a long process. SWB anticipates that permits will be approved in a timely manner by working with appropriate agencies during the detailed technical proposal and design phases. The EIS addresses this risk factor in detail and concludes that environmental factors can be mitigated by appropriate design and construction considerations.

SWB anticipates the risk of not obtaining permits in a timely manner is low based upon the Approved Environmental Impact Statement.

Identify any local, state and federal resources that the proposer contemplates requesting for the project. Describe the total commitment (financial, services, property, etc.), if any, expected from governmental sources; and the timing of any anticipated financial commitment.

In order to finance the Third Hampton Roads Crossing project with non-recourse toll revenue bond, the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel will have to be tolled and clearly recognized as part of the same vital transportation system as the Third Hampton Roads Crossing. VDOT must obtain approval to toll these facilities. Various combinations of tolls on the Hampton Roads Bridge Tunnel and Monitor Merrimac Memorial Bridge Tunnel and other funding would establish a base for construction of the Third Hampton Roads Crossing.

Certain right of way will be required for the project. It is assumed that all costs associated with this land are included in the $70M VDOT right-of-way costs. This $70M VDOT estimate has been incorporated into the SWB project budget. SWB may need assistance from VDOT in obtaining this land through the eminent domain process.

The SWB analysis is based on using non-recourse toll revenue bonds as the primary use of funds. This analysis indicates that the necessary toll levels to support construction would probably not be acceptable to the general public. A combination of an acceptable level of tolls and other funding is required. VDOT will have to obtain any funds necessary to supplement the toll revenue financing from other sources.

Case 1	Phase I & II Only	
	Toll Rate:	$2.00 (2008)
		$5.75 (2013)
Sources:		
Bond Proceeds		
Par Amount		2,918,793,864
Uses:		
Project Fund Deposits		
Phases I & II Construction Draws (Net)		2,326,231,129
Other Fund Deposits		
Debt Service Reserve Fund		291,879,386
Capitalized Interest		64,708,680
Delivery Date Expenses		
Cost of Issuance		43,781,908
Bond Insurance		174,937,456
Other Uses of Funds		
Additional Funding for Phases I & II		17,255,305
Total		**2,918,793,864**
Total Additional/(Shortfall of Funds)		**17,255,305**

Case 2	Phase I Through V	
	Toll Rate:	$2.00 (2008)
		$8.50 (2013)
Sources:		
Bond Proceeds		
Par Amount		3,205,828,744
Uses:		
Project Fund Deposits		
Phases I & II Construction Draws (Net)		2,326,231,129
Phases III - V Construction Draws (Net)		1,146,192,490
Other Fund Deposits		
Debt Service Reserve Fund		320,582,874
Capitalized Interest		65,413,042
Delivery Date Expenses		
Cost of Issuance		48,087,431
Bond Insurance		190,311,121
Other Uses of Funds		
Funding Shortfall for Phases III - V		-890,989,343
Total		**3,205,828,744**
Total Additional/(Shortfall) of Funds		**-890,989,343**

Alternate A	Phase I Through V	
	Toll Rate:	$2.00 (2008)
		$3.00 (2013)
Sources:		
Bond Proceeds		
Par Amount		2,169,957,459
Uses:		
Project Fund Deposits		
Phases I & II Construction Draws (Net)		2,326,231,129
Phases III - V Construction Draws (Gross)		1,242,450,000
Other Fund Deposits		
Debt Service Reserve Fund		216,995,746
Capitalized Interest		62,871,148
Delivery Date Expenses		
Cost of Issuance		32,549,362
Bond Insurance		131,219,941
Other Uses of Funds		
Funding Shortfall for Phases I & II		-599,909,867
Funding Shortfall for Phases III - V		-1,242,450,000
Total		**2,169,957,459**
Total Additional/(Shortfall of Funds)		**-1,842,359,867**

Alternate B	Phase I & II Only	
	Toll Rate:	$2.00 (2008)
		$3.00 (2013)
Sources:		
Bond Proceeds		
Par Amount		2,169,957,459
Uses:		
Project Fund Deposits		
Phases 1 & II Construction Draws (Net)		2,326,231,129
Other Fund Deposits		
Debt Service Reserve Fund		216,995,746
Capitalized Interest		62,871,148
Delivery Date Expenses		
Cost of Issuance		32,549,362
Bond Insurance		131,219,941
Other Uses of Funds		
Funding Shortfall for Phases I & II		-599,909,867
Total		**2,169,957,459**
Total Additional/(Shortfall) of Funds		**-599,909,867**

Identify who will benefit from the project, how they will benefit and how the project will benefit the overall transportation system.

The Hampton Roads region of Virginia has 1.7 million residents and encompasses the area from James City County, Surry County and Southampton County east to the Atlantic Ocean. The region is divided by numerous waterways, foremost of which are the Chesapeake Bay, Hampton Roads, the York River, the James River, and the Elizabeth River. The region has a highly diverse social structure and demographics. With the construction of the Hampton Roads Bridge Tunnel, James River Bridge and the most recent Monitor Merrimac Memorial Bridge Tunnel, the mobility provided to the population has improved significantly. People routinely traverse Hampton Roads for business, shopping, and recreation purposes. The regions economy also employs individuals who reside outside the area, and the economy of the area is greatly dependent upon continued and improved access across Hampton Roads.

The Hampton Roads Bridge Tunnel is the major link across Hampton Roads. Its four lanes are currently operating at capacity with significant delays a routine occurrence. The only other interstate access across Hampton Roads is the Monitor Merrimac Memorial Bridge Tunnel, which has capacity to accept additional traffic but does not directly serve the major residential, business, and military areas of Virginia Beach or Norfolk. The James River Bridge is about five miles west of the Monitor Merrimac Memorial Bridge Tunnel and has capacity for increased traffic but it also does not directly serve major population centers. This traffic situation is limiting the growth of the region and impacts the required mobility of U.S. Military in the area.

The Major Investment Study (MIS) identified the need to increase capacity and to provide a transportation facility that would reduce Hampton Roads Bridge Tunnel traffic while providing improved access with greatly increased capacity from the peninsula to the southern Hampton Roads area. The MIS also identified the need to provide linkage to major ports, existing highways and to serve as a major freight corridor. The EIS (Locally Preferred Alternative) now proposed by SWB as the Third Hampton Roads Crossing will satisfy these community needs by:

- Reducing the traffic on the Hampton Roads Bridge Tunnel traffic by nearly 20 percent from the no build alternative bringing the level of service on this route to acceptable levels.
- Providing highways that are in tune with current and projected origin and destination patterns.
- Providing access to all current and planned port areas.
- Providing highways that will serve as a major freight corridor.
- Providing direct connections with existing major highways in the area.
- Providing a facility at significantly lower cost than planned.
- Providing a facility significantly earlier than planned.
- Providing the first facility that will have HOV access across Hampton Roads.
- Providing a facility that can accommodate rail transit.
- Making all of these improvements at a significantly lower cost and significantly earlier than planned.

The proposed facility will also act as an emergency access/egress route in case of an emergency like a hurricane. The Third Hampton Roads Crossing will more than double the capacity to evacuate people from and to the peninsula or the US58/US460 corridor.

Construction of the Third Hampton Roads Crossing will benefit social and economic aspects of the region and improve the quality of life of its inhabitants. The improved access will foster the continuing growth of the region's increasingly diverse economy by making it easier to ship goods into and out of the region through its port facilities and reduce existing industrial traffic in residential areas. The improved access will also aid the continuing growth of tourism, which is a key aspect of the area economy. The crossing will improve the readiness posture of the U.S. military through alternate overland route capacity in case of emergency and the potential for transshipping through a fourth port area. The project will foster the growth of a new Commonwealth port facility and the Maersk/Sealand terminal which is currently moving into its construction phase. These new port facilities aid mobility and permit the continuing favorable growth of the maritime industry that is a very significant business interest in the region and the Commonwealth.

Maintaining economic growth and attracting new business to the area demands that employees have an acceptable quality of life. Improved access across the waterways in the area is critical for the individual mobility and choices for alternative routes for recreation, employment and shopping. The region will be in virtual gridlock surrounded by air pollution without construction of the Third Hampton Roads Crossing. Without construction of the Third Hampton Roads Crossing the situation will degrade the quality of life to a point that is unacceptable to both employees and employers and the increasing numbers of retired residents. The alternative is for some of the businesses to leave the area. This is not acceptable from local, state or national viewpoints. All depend on Hampton Roads as a major international port, quality vacation area and home to the U.S. Navy's largest operational base.

On a short-term basis, the construction of the Third Hampton Roads Crossing will provide employment to numerous individuals and provide opportunities for a large variety of local and regional businesses. SWB is committed to utilizing local resources to the maximum extent possible. The construction effort will create some short-term growth in the local economy followed by the long-term growth in other business areas created by improved access and quality of life.

Identify any anticipated government support or opposition, or general public support or opposition for the project.

The Major Investment Study (MIS) and the National Environmental Policy Act (NEPA) process have investigated the problem of providing a suitable Third Hampton Roads Crossing for over a decade. During this process there have been numerous opportunities for the public to comment on a variety of routing alternatives that would foster economic growth while maintaining a suitable quality of life. The resultant locally preferred alternative provides for the interests of virtually everyone in a manner which has very minor impact on the environment.

The NEPA process and associated public hearings show the routing is acceptable to residents, business interests and local governments. It is expected that there may be occasional concerns about some, currently unidentified, issues during further development and construction. SWB will establish and maintain a community relations office to be sensitive to these types of issues and to provide all stakeholders with continuous information as the project is developed and constructed.

Almost everyone concurs with the need for the project and the planned alignment. SWB recognizes that concerns have been voiced regarding methods to finance the facility. Differing opinions regarding financing alternatives are expected to continue, but due to the tremendous support for the project it is expected that an acceptable method of financing can be found through dialogue with the relevant parties.

Explain the strategy and plans that will be carried out to involve and inform the agencies and the public in areas affected by the project.

The success of the Third Hampton Roads Crossing project is contingent upon consensus among the Virginia Department of Transportation, local businesses and interest groups, state and local officials, and the general public.

SWB will cooperate with these groups to ensure cohesiveness of efforts towards the successful completion of the undertaking desired by all stakeholders. SWB will develop and maintain a high level of positive communication and support by informing and educating the many segments of the public prior to and during construction. SWB will also be involved in open dialogue with all affected civic groups to keep them abreast of project status and to listen to any concerns. SWB's goal, simply stated, is to ensure that all citizens and political groups, as important stakeholders, have an opportunity to comment and become involved with the success of the project.

A large portion of the SWB public involvement program will involve meeting with various groups, coordinating with the media, issuing press releases and maintaining an updated internet web site. We expect the Third Hampton Roads Crossing project will be very successful and SWB wants all stakeholders to be satisfied with the status and to take pride in the fact that their support has lead to a project that satisfies their needs for the foreseeable future.

This project is locally developed and strongly supported by the citizens of the Hampton Roads area. SWB is headquartered in Hampton Roads and is well aware of the importance of continuing the positive involvement of the citizens. SWB will do everything within its capability to ensure that the general public remains informed and that they share in the success of the project.

5.a Public Benefits

Describe the significant benefits to the community, region or state. Identify any state benefits resulting from the project including the achievement of state transportation policies or other state goals.

In the fall of 2000 the Virginia Department of Transportation (VDOT) estimated that the Third Hampton Roads Crossing project would require a construction period of 14 years resulting in a completion date of 2014. By that time it is expected that air pollution will have reached an unacceptable level, the region will be in nearly constant gridlock, and that businesses would be leaving the area due to deterioration of quality of life, which makes recruiting and retention of quality employees extremely difficult. One of the areas major employers, the U.S. Navy, will continue to have less mobility than desired, as relocation is not an option. Clearly delaying completion beyond 2014 is not acceptable. The Environmental Assessment "no build" option is not acceptable to the inhabitants of the Hampton Roads area.

In the intervening years there has not been any progress on the project while the area has seen moderate growth, increased congestion and growing concerns with environmental issues. SWB can still design and build the Third Hampton Roads Crossing and have it complete by 2013, or earlier, using a financing-design-build approach.

Even with a 2013 completion date congestion and environmental considerations will become far worse than currently exist. The continued delay in executing the Third Hampton Roads Crossing project is impacting business development and creating a reduced quality of life for residents and other workers in the area. Recent incidents associated with Hurricane Isabel and a maritime incident serves to point out just how fragile the transportation system is in the 2003/2004 timeframe. Normal growth of the commercial, tourist and residential traffic will make transportation throughout the region intolerable by the earliest time the facility can be available.

Current and future inhabitants of the area will clearly be the major benefactors of the project. The transportation improvements will foster the development of existing businesses and create opportunity for new industry while promoting those aspects of the area desirable for tourists. The continued growth of the very successful commercial port will make Virginia a more favored port of call for international commerce and create growth that is beneficial to the entire Commonwealth. The state would also benefit in numerous other ways associated with the healthy development of the second largest economic region in the Commonwealth.

The Third Hampton Roads Crossing will also provide the capability for improved transit operations. High occupancy vehicle lanes and bus rapid transit capability will be available upon project completion.

5.b Economic Benefit

Describe the significant benefits to the state's economic condition. Discuss whether this project is critical to attracting or maintaining competitive industries and businesses to the state or region.

The proposed project will benefit the entire economy of the Commonwealth, including significant direct benefits to the tourism, port, and military aspects of the local economy. Underutilized land will become available/accessible for business, residential or tourism purposes. The project will also affect the economic development of areas adjacent to Hampton Roads. The project's capability for future transit operations between jurisdictions in the Hampton Roads area will provide an alternative means of transportation throughout the region.

The project will provide direct access to Craney Island, which is to be developed into a port facility. This development is highly advantageous to the Commonwealth and the nation's economy. The connecting roadways will provide direct access to other port facilities in the area and the entire highway system of the United States through the I-64 link on the peninsula and the US 58 and Route 460 links along the southern part of Virginia. This project will also provide vital alternate routes for trucking using the Norfolk International Terminals (NIT) and Lamberts Point Ports, thus reducing heavy traffic on residential streets.

The project will provide an additional crossing of the Elizabeth River to directly access Norfolk and Virginia Beach. The Hampton Roads Bridge Tunnel is currently operating at its design capacity. Continual congestion impacts residents' quality of life, while detracting visitors and businesses, with the resultant limitation on further economic development. This project will provide direct access with HOV and multi-modal capability, which will benefit the tourism industry and foster all aspects of the region's economic growth. This crossing will also benefit the military by enhancing their mobility by providing an additional, more direct access to and from naval installations.

By improving the quality of life, the Third Hampton Roads Crossing project will ensure the growth of businesses that depend on a highly skilled workforce. These types of businesses provide significant benefits to the region and the state.

SWB's proposal to build the project in less time and at a lower cost than planned will mitigate all problems associated with a later completion and will stimulate positive economic growth for the region.